

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

	)	
In the Matter of the Application for a Site Certificate	)	FINAL ORDER
for the Perennial Wind Chaser Station	)	
_____	)	

Issued by  
Energy Facility Siting Council

September 18, 2015

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## **Acronyms and Abbreviations**

APLIC	Avian Powerline Interaction Committee
ASC	Application for Site Certificate
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
Council	Oregon Energy Facility Siting Council
CUP	Conditional Use Permit
dBA	Sound Pressure Level
department	Oregon Department of Energy
DEQ	Department of Environmental Quality
DOGAMI	Department of Geology and Mineral Industries
DPO	Draft Proposed Order
DSL	Department of State Lands
EFSC	Oregon Energy Facility Siting Council
EFU	Land Zoned For “Exclusive Farm Use”
EMF	Electric and magnetic Fields
EPC	Engineering, Procurement and Construction
ESCP	Erosion and Sediment Control Plan
FAA	Federal Aviation Administration
GL	Grassland Habitat Subtype
kV	Kilovolt(s)
LCDC	Land Conservation and Development Commission
MCE	Maximum Considered Earthquake
mG	Milligauss
MW	Megawatt(s)
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
OPRD	Oregon Parks and Recreation Department
ORBIC	Oregon Biodiversity Information Center
ORNHIC	Oregon Natural Heritage Information Center
ORS	Oregon Revised Statute

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OWRD	Oregon Water Resources Department
PUC	Oregon Public Utility Commission
RAI	Request for Additional Information
SAG	Special Advisory Group
SCADA	Supervisory, Control and Data Acquisition
SCF	Standard Cubic Feet
SHPO	Oregon State Historic Preservation Office
SSURGO	Soil Survey Geographic Database
SWA	State Wildlife Area
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WGS	Washington Ground Squirrel or Washington Ground Squirrel Habitat Subtype
WPCF	Water Pollution Control Facility
ZVI	Zone of Visual Influence

## I. INTRODUCTION

This final order addresses the Application for a Site Certificate (ASC) for the construction and operation of the Perennial Wind Chaser Station to be located in Umatilla County, Oregon. The applicant is Perennial-WindChaser, LLC. The Energy Facility Siting Council (the "Council") issues this final order in accordance with Oregon Revised Statute (ORS) 469.370(1), based on its review of the ASC, the Oregon Department of Energy's (department) draft proposed order and proposed order, and the comments and recommendations received on the application by state agencies, local government, tribal organizations and the public.

It is the public policy of the State of Oregon that "the siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety and in compliance with the energy policy and air, water, solid waste, land use and other environmental protection policies of this state."<sup>1</sup> ORS 469.320 requires a site certificate from the Council before construction of a "facility." ORS 469.300(14) defines "facility" as an "energy facility together with any related or supporting facilities." The proposed Perennial Wind Chaser Station qualifies as an "energy facility" under the definition in ORS 469.300(11)(a)(A) as it is a proposed combustion turbine power plant with a nominal electric generating capacity of at least 25 megawatts. The definitions contained in ORS 469.300 and Oregon Administrative Rule (OAR) 345-001-0010 apply to terms used in this final order.

A site certificate is a binding agreement between the State of Oregon and the applicant, authorizing the applicant to construct and operate a facility on an approved site, incorporating all conditions imposed by the Council on the applicant.<sup>2</sup> A site certificate issued by the Council binds the state and all counties, cities and political subdivisions of Oregon. Once the Council issues the site certificate, any affected state agency, county, city or political subdivision must, upon submission by the applicant of the proper applications and payment of the proper fees, but without hearing or other proceeding, promptly issue the permits, licenses and certificates addressed in the site certificate.<sup>3</sup> The Council has continued authority over the site for which the site certificate is issued and may inspect the site at any time in order to ensure that the facility is operated consistently with the terms and conditions of the site certificate.<sup>4</sup>

The Council does not have jurisdiction over matters that are not included in and governed by the site certificate or amended site certificate, including design-specific construction or operating standards and practices that do not relate to siting, as well as matters relating to employee health and safety, building code compliance, wage and hour or other labor regulations, or local government fees and charges.

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<sup>1</sup> ORS 469.310.

<sup>2</sup> ORS 469.300(26).

<sup>3</sup> ORS 469.401(3).

<sup>4</sup> ORS 469.430.

1  
2 In addition to the conditions included in this final order, the site certificate holder is subject to  
3 the conditions and requirements contained in the rules and standards of the Council and in  
4 local ordinances and state laws in effect on the date the certificate is executed. Under ORS  
5 469.401(2), upon a clear demonstration of a significant threat to the public health, safety, or  
6 the environment that requires application of later-adopted laws or rules, the Council may  
7 require compliance with such later-adopted laws or rules. The Council recognizes that many  
8 specific tasks related to the design, construction, operation, and retirement of the facility will  
9 be undertaken by the applicant's agents or contractors. Nonetheless, the certificate holder  
10 remains responsible for ensuring compliance with all provisions of the site certificate.

11  
12 Based upon its review, including conclusions contained in this final order, the Council approves  
13 the application and grants issuance of a site certificate for the Perennial Wind Chaser Station,  
14 subject to the conditions set forth in this final order.

## 15 16 **II. DESCRIPTION OF THE FACILITY**

17  
18 The information presented in this section is based upon details provided in the Application for  
19 Site Certificate (ASC). Section II.A describes the location and site boundary and Section II.B  
20 describes the facility.

### 21 22 **II.A. Location and Site Boundary**

23  
24 As defined in OAR 345-001-0010(55), the term "site boundary" means the perimeter of the site  
25 of a proposed energy facility, its related or supporting facilities, all temporary laydown and  
26 staging areas and all corridors proposed by the applicant. The term "energy facility site"<sup>5</sup>  
27 means all land upon which an energy facility is located or proposed to be located.<sup>6</sup>

28  
29 The energy facility site is located in Umatilla County, approximately 5 miles southwest of  
30 Hermiston, Oregon, adjacent to the existing Hermiston Generating Plant in Township 4 North,  
31 Range 28 East, Willamette Meridian. From the energy facility site, the supporting natural gas  
32 lateral pipeline would be routed 4.63 miles south and the transmission line would be routed  
33 11.59 miles north. Overall, the applicant estimates approximately 23 acres of permanent  
34 impact and 37 acres of temporary impact.<sup>7</sup> The facility would be accessed via Westland Road,  
35 which provides access to Interstate Highways 82 and 84. The energy facility site is currently  
36 clear of any significant structures or vegetation.<sup>8</sup>

---

<sup>5</sup> The term 'energy facility' means only the electric power generating plant while the term 'facility,' as defined in ORS 469.300 (14), means the energy facility together with any related or supporting facilities.

<sup>6</sup> OAR 345-001-0010(53)

<sup>7</sup> ASC, Exhibit C, C-2.

<sup>8</sup> ASC, Exhibit B, B-2.

## **II.B. The Facility**

### ***A. The Energy Facility***

Perennial-WindChaser, LLC proposes to construct and operate up to four General Electric LMS100 (or equivalent) natural gas-fired combustion turbine generators in simple cycle, producing up to 415 megawatts (MW) of electric power. In this type of system, natural gas is combusted in the combustion turbine generator (CTG), then expanded to drive the turbine generator, producing electric power.<sup>9</sup>

As explained in the ASC, the proposed energy facility or “Station” would include four generating units, each consisting of one GE LMS100 combustion turbine, intercooler heat exchanger, electrical generator, selective catalytic reduction unit, catalytic oxidation unit, and stack. The applicant will only burn natural gas, and each generating unit would be connected to a common cooling tower.<sup>10</sup>

OAR 345-001-0010(40) defines a “non-base load power plant” as a “fossil-fueled generating facility that is limited by the site certificate to an average number of hours of operation per year of not more than 6,600 hours. For a non-base load power plant designed to operate at variable load, the facility’s annual hours of operation are determined by dividing the actual annual electric output of the facility in megawatt-hours by the facility’s nominal electric generating capacity in megawatts.” Perennial proposes to operate the Station no more than 4,400 hours per year at full load, with an expected 500 startups and shutdowns each year, for a total of 4,736 hours.<sup>11</sup>

### ***B. Related or Supporting Facilities***

The proposed facility includes the following related or supporting facilities:

#### **Buildings:**

The facility would include a single pre-engineered metal building to serve as a control room and administration building. This building would also house the water treatment equipment.<sup>12</sup> Separate smaller buildings and enclosures are also proposed to house the chemical feed equipment, turbine control and main power, distribution power, 5-kV distribution panel and gas compressor motor control center, gas compressors, compressor lube oil skid, diesel fuel pump, the continuous emission monitoring shed and the alternative zero liquid discharge system, if this option is selected. The zero liquid discharge system is discussed in further detail below. Table B-1, below, identifies the units of each building component.

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<sup>9</sup> ASC, Exhibit B, B-4.

<sup>10</sup> ASC, Exhibit B, B-2.

<sup>11</sup> ASC, Exhibit B, B-2.

<sup>12</sup> Total area: 8,000 square feet. ASC, Exhibit B, B-6.



**Table B-1 Building Dimensions**

<b>Component<sup>1</sup></b>	<b>Number of Units</b>	<b>Dimensions (L x W x H) (feet)</b>	<b>Total Area (square feet)</b>
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	3	7.5 x 20 x 8	450
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
<b>Key:</b> CEMS = continuous emission monitoring shed; H = height; kV = kilovolt; L = length; MCC = motor control center W = width; ZLD = zero liquid discharge <b>Notes:</b> 1. Dimensions are approximate (plus or minus 1 foot). Dimensions represent one unit.			

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

#### 5 Fencing and Roads

6 The applicant proposes to access the Station from Westland Road via Interstate Highway 82 or  
7 84. A paved loop road approximately 24 feet wide and 3,000 feet long is proposed for normal  
8 truck and operator vehicle traffic, with connection to Westland Road. An entrance bridge would  
9 be constructed to cross the irrigation canal at the entrance to the Station.<sup>13</sup>

11 A spur road off the loop road is also proposed to allow for access to structures and equipment.  
12 A paved road, 20 feet wide and 232 feet long, would also be constructed through the center of  
13 the four CTGs so that each turbine could be accessed from the paved loop. No temporary  
14 access roads are proposed for the project.<sup>14</sup>

16 To service and access the 550-kV step-up substation, the applicant proposes to use an existing  
17 dirt road, branching off from the road parallel to Brownell Ditch. To utilize this road, the only

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<sup>13</sup> ASC, Exhibit B, B-8.

<sup>14</sup> ASC, Exhibit B, B-8.

1 improvement necessary is the addition of gravel to the road surface.<sup>15</sup> Table B-2 in the ASC  
2 provides a summary of the proposed gravel uses, including the dimensions and square  
3 yardage.<sup>16</sup>

4  
5 A chain-link fence with three strands of barbed wire would surround the Station. The on-site  
6 switchyard would be surrounded by its own chain-link fence to separate the high-voltage  
7 switchyard from the rest of the Station.<sup>17</sup> Additionally, the 550-kV step-up substation would be  
8 surrounded by a security fence.

#### 9 10 Stormwater Detention Basin

11 One stormwater detention basin, approximately 0.9 acres in size, would be located within the  
12 20-acre Station fence. The basin would have a water storage depth of approximately 11 feet  
13 and would be sized to contain a 100-year, 24-hour rainfall with 50 percent extra capacity.  
14 Stormwater collected in the basin would infiltrate into the ground under the basin through  
15 gravity and natural drainage.<sup>18</sup>

#### 16 17 Natural Gas Pipeline

18 A natural gas pipeline lateral is proposed to provide fuel for the Station. The lateral, to be  
19 owned and operated by Cascade Natural Gas Corporation (CNG), would bring natural gas to the  
20 energy facility site from an existing pipeline owned by Gas Transmission Northwest (GTN). The  
21 natural gas pipeline lateral would tap the GTN pipeline approximately 4.63 miles south of the  
22 energy facility site, at an existing metering station, and would be approximately 12 to 18 inches  
23 in diameter.<sup>19</sup> The lateral would be located underground within an already established 50-foot-  
24 wide right of way associated with the Hermiston Generating Plant (HGP) gas pipeline.<sup>20, 21</sup>

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<sup>15</sup> ASC, Exhibit B, B-16.

<sup>16</sup> ASC, Exhibit B, B-8.

<sup>17</sup> ASC, Exhibit B, B-16.

<sup>18</sup> ASC, Exhibit B, B-9.

<sup>19</sup> ASC, Exhibit B, B-14.

<sup>20</sup> ASC, Exhibit B, B-14.

<sup>21</sup> The department received oral testimony during the public hearing on May 14, 2015, regarding the location of the proposed natural gas pipeline. The commenter requested that the proposed natural gas pipeline “stay within the existing easement” and away from a feedlot located on the commenter’s property. The commenter’s property was not further identified nor the location of the feedlot within the property. The proposed natural gas pipeline would be located underground within an existing 50 foot wide right of way as detailed on Figures C-7, C-8 and C-9 of the ASC. Pursuant to ORS 469.300(26), a “site certificate” is a binding agreement between the State of Oregon and the applicant, authorizing the applicant to construct and operate a facility on an approved site. Further, pursuant to mandatory conditions A.3 and A.4, the certificate holder must submit to the department the legal description of the facility and construct the facility as substantially described in the ASC. Accordingly, based upon the mandatory conditions and the binding terms of the site certificate, the Council does not make any revisions or require additional conditions. PERAPPD033.

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

#### 5 Transmission Line

6 The applicant proposes to utilize primarily the existing transmission structures for the project.  
7 The existing transmission structures currently support two distinct circuits: 1) the HGP’s 230-kV  
8 circuit to BPA McNary on one side; and 2) Umatilla Electric Cooperative’s (UEC) 115-kV line on  
9 the other. The applicant would replace UEC’s 115-kV line on the existing structures with a new  
10 230-kV single circuit transmission line. The initial tie-in to the existing line would occur at the  
11 northwest corner of the energy facility site.<sup>22</sup> From the northwest corner, the line would cross  
12 Westland Road to a new pole on the western side of Westland Road. This pole would connect  
13 to the existing structures of the Hermiston to McNary line. As stated in the ASC, the first  
14 connecting pole of the existing line may need to be replaced as well. From the onsite  
15 switchyard in the southwest corner of the energy facility site, the applicant anticipates that the  
16 installation of four new towers or poles would be required to reach the site’s northwestern  
17 corner boundary.<sup>23</sup> If the first existing pole must be replaced, a total of six new poles would be  
18 required for the project. If the existing pole does not need to be replaced, a total of five new  
19 poles would be required.<sup>24</sup>

21 Umatilla Electric Cooperative has existing right of ways for the western side of Westland Road.  
22 If two new poles are required on the west side of Westland Road (i.e. if the existing pole  
23 requires replacement in addition to the proposed new pole), the applicant estimates that about  
24 0.46 acres of land would be temporarily disturbed during this installation. A new right of way  
25 (ROW) is also expected to be necessary across Westland Road to connect the new transmission  
26 line from the northwest corner of the Station to the first proposed new pole on the west side of  
27 Westland Road. The first new connecting pole would be 215 feet from the boundary at the  
28 northwest corner of the Station.<sup>25</sup> The new ROW would, therefore, be 215 feet long and 100  
29 feet wide. However, any ground disturbance associated with the installation of the new pole  
30 and potential replacement pole would occur within the boundary of the Energy Facility Site or  
31 in the existing ROW. Any disturbances associated with the four new poles proposed to be  
32 located within the energy facility site are considered permanent impacts and considered in the  
33 disturbance areas for the site as a whole (see ASC Exhibit C, Table C-1).<sup>26</sup>

35 From the tie-in, the new 230-kV line would extend approximately 11.59 miles, using the existing  
36 infrastructure, before terminating at the 500-kV step-up substation. No new poles were  
37 proposed for this portion of the line. To replace the 115-kV line with the proposed 230-kV line,

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<sup>22</sup> ASC, Exhibit B, B-15.

<sup>23</sup> ASC, Exhibit B, B-15.

<sup>24</sup> ASC, Exhibit B, B-15.

<sup>25</sup> ASC, Exhibit B, B-15.

<sup>26</sup> ASC, Exhibit B, B-15.

1 pulling stations would be required approximately every 3 miles and at turns, pulling and  
2 tightening the wires of the transmission lines. The equipment would not extend beyond the  
3 boundary of the existing transmission line ROW.<sup>27</sup>

4  
5 The proposed transmission line does not qualify as an “energy facility” itself because ORS  
6 469.300(1)(a)(C) excludes from the energy facility definition, lines constructed entirely within  
7 500 feet of an existing corridor occupied by a high voltage transmission line with a capacity of  
8 230 kV or more. The applicant proposes to utilize the existing infrastructure, which currently  
9 includes a line with a capacity of 230-kV, by upgrading the current 115-kV side of the towers to  
10 230-kV. Therefore, a corridor selection assessment is not necessary for this transmission line.

#### 11 500-kV Step-Up Substation

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

17  
18 Additionally, an underground cable would be required to connect the 500-kV step-up  
19 substation to the McNary Substation tie-in location. The underground cable is proposed to be  
20 477 feet long and installed in a concrete-encased duct bank approximately 2 feet wide by 2 feet  
21 high, with 3 feet of cover. A fenced termination structure (riser) occupying about 0.51 acres  
22 would also be constructed to connect the underground line to the aboveground McNary lines.  
23 The riser termination structure would bring the underground cable into the McNary  
24 Substation.<sup>28</sup>

#### 25 Interconnecting Water Pipelines

26  
27 The applicant proposes to use the Port of Umatilla as the source of all non-potable water  
28 required to meet the Station’s needs. The applicant proposes to install a pipe to connect the  
29 Station to the existing Port of Umatilla water, which would be constructed below grade with a  
30 trench under the railroad tracks. The new pipeline is estimated to be approximately 208 feet  
31 long and 12-14 inches in diameter.

32  
33 Cooling tower blowdown from the Station would be reclaimed and sent to the cooling tower  
34 basin of the HGP for reuse as circulating water for the HGP. An additional wastewater pipeline  
35 would be constructed from the Station to the HGP to reclaim this blowdown. The pipeline  
36 would be approximately 538 feet, below grade and 10 to 12 inches in diameter. As discussed  
37

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<sup>27</sup> ASC, Exhibit B, B-15. The applicant proposes to work with the HGP to ensure that there would be no interruptions of service to the plant during recondutoring activities.

<sup>28</sup> ASC, Exhibit B, B-16.

1 below, if the Station is unable to send cooling tower blowdown to HGP, the applicant proposes  
2 to install a zero liquid discharge system.<sup>29</sup>

3  
4 Zero Liquid Discharge System (Alternative Scenario)

5 As explained in the ASC, Lamb Weston's Water Pollution Control Facilities permit allows Lamb  
6 Weston's facility to manage and dispose of the HGP's wastewater by land application for  
7 beneficial use on the North Farm and Madison Farm in accordance with the Operations,  
8 Monitoring and Management Plan approved by the Oregon Department of Environmental  
9 Quality (DEQ). Lamb Weston's permit is currently under review by DEQ and, because it is under  
10 review, Lamb Weston has not been able to consent to the applicant sending reclaimed water to  
11 the HGP as proposed above.<sup>30</sup> If Lamb Weston is not able to accept reclaimed water from the  
12 HGP that has come from the Station, the applicant proposes to install a Zero Liquid Discharge  
13 (ZLD) system.<sup>31</sup>

14  
15 As described in the ASC, the ZLD system would consist of a clarifier, a high efficiency reverse  
16 osmosis (HERO) system and a crystallizer. In this system, cooling tower blowdown and  
17 miscellaneous plant wastewaters would first be routed to the clarifier to remove suspended  
18 solids. The clarifier effluent would then enter the HERO system. Reject water from the HERO  
19 system would be sent to the crystallizer for complete crystallization and precipitation of solids.  
20 An electric boiler would be used to generate low pressure steam for the crystallization  
21 process.<sup>32</sup> The system would be sized to approximately 140 gallons per minute (gpm) of  
22 blowdown from the cooling tower and miscellaneous plant wastewaters. A 200,000 gallon tank  
23 is also proposed to handle any potential fluctuations in the operation of the ZLD system.  
24 Effluent from the ZLD system could be returned to the cooling tower basin as makeup water,  
25 and the solids would be transported offsite as waste. The applicant estimates that 16,830  
26 pounds per day of solids would be produced and transported offsite at a frequency of one truck  
27 load per day.<sup>33</sup> With a ZLD system, the electrical output would be approximately 411.9  
28 megawatts, with the actual output dependent upon the technology selected, as opposed to the  
29 proposed 415 megawatts. The applicant attributes the decrease entirely to the ZLD system.<sup>34</sup>

30  
31 Utility Lines

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

36  

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<sup>29</sup> ASC, Exhibit B, B-16.

<sup>30</sup> ASC, Exhibit B, B-17.

<sup>31</sup> ASC, Exhibit B, B-17.

<sup>32</sup> ASC, Exhibit B, B-17.

<sup>33</sup> ASC, Exhibit B, B-17.

<sup>34</sup> ASC, Exhibit Y, Appendix Y-1.

1 Temporary Construction Facilities

2 An additional area adjacent to the Station is proposed for five construction offices, construction  
3 parking, construction laydown and temporary storage of soil displaced during construction. The  
4 temporary construction area totals approximately 5.11 acres and is located to the southwest of  
5 the Station. The specific location is depicted in the ASC at Exhibit B, Figure B-2.

6  
7 **III. PROCEDURAL HISTORY**

8  
9 **III.A. Notice of Intent**

10  
11 On May 14, 2012, the applicant submitted to the department a Notice of Intent (NOI) to file an  
12 application for a site certificate (ASC). In anticipation of the NOI, on May 11, 2012 the Council  
13 appointed the Umatilla County Board of Commissioners and the Morrow County Court as  
14 Special Advisory Groups (SAG), in accordance with ORS 469.480(1).<sup>35</sup> On June 12, 2012 the  
15 department issued public notice of the NOI to the Council's general mailing list and to adjacent  
16 property owners as defined at OAR 340-020-0011(1)(f). Further, in accordance with OAR 345-  
17 020-0040, the NOI was distributed to the SAGs and reviewing agencies, along with a  
18 memorandum to reviewing agencies requesting comment on the NOI. The department also  
19 published notice of the NOI on June 12, 2012 in the East Oregonian, a newspaper of general  
20 circulation in the area of the facility. The public notice and newspaper notice contained an  
21 announcement of a public information meeting, which the department held department on  
22 June 25, 2012 in Hermiston, Oregon. The NOI comment deadline was July 2, 2012. Pursuant to  
23 OAR 345-015-0140, the department provided the applicant with copies of each public comment  
24 for consideration in the development of the ASC.

25  
26 On September 4, 2012 the applicant submitted an amended NOI to the department. The  
27 amended NOI altered the proposed transmission line routes and removed the previously  
28 proposed open-air switchyard. On September 19, 2012, the department issued public notice of  
29 the amended NOI to the Council's general mailing list and to adjacent property owners. The  
30 department published the notice in the East Oregonian and Heppner Gazette-Times on  
31 September 19, 2012. Additionally, the amended NOI was distributed to the Special Advisory  
32 Groups and reviewing agencies. The comment deadline on the amended NOI was October 19,  
33 2012. A copy of each comment was provided to the applicant for review and consideration.

34  
35 Pursuant to ORS 469.330(3) and OAR 345-015-0160(1) and (3), the department issued a project  
36 order on February 6, 2013, which specified the state statutes, administrative rules, and local,  
37 state, and tribal permitting requirements applicable to the construction and operation of the  
38 facility.

39  

---

<sup>35</sup> Order Appointing Special Advisory Groups, May 11, 2012. Under ORS 469.480(1), the Council must designate as a Special Advisory Group the governing body of any local government within whose jurisdiction the facility is proposed to be located.

1 Subsequently, on August 13, 2013, the applicant submitted a second amended NOI to the  
2 department. The second amended NOI again altered the proposed transmission line route. On  
3 August 23, 2013, the department issued public notice of the second amended NOI to the  
4 Council's general mailing list and to the adjacent property owners. The department published  
5 notice in the East Oregonian on August 23, 2013. The second amended NOI was also  
6 distributed to the SAGs and reviewing agencies. The comment deadline for the second  
7 amended NOI was September 23, 2013. At close of the comment period, a copy of each  
8 comment received was provided to the applicant.

10 As noted above, within the second amended NOI, the facility was no longer proposed to be  
11 located in Morrow County, and was instead proposed to be located within the City of Umatilla  
12 because of the amended proposal to use the existing transmission line infrastructure, which is  
13 located within the city limits. On May 3, 2013, the Council appointed the Umatilla City Council  
14 as another SAG for the proposed facility.<sup>36</sup>

16 Pursuant to ORS 469.330(3) and OAR 345-015-0160(1) and (3), the department issued an  
17 amended project order on September 30, 2013.

### 19 **III.B. Application for Site Certificate**

21 The department received the preliminary Application for Site Certificate (pASC) on April 3,  
22 2014. The department distributed the pASC to reviewing agencies and requested comments on  
23 the pASC no later than May 5, 2014. Additionally, the department posted an announcement on  
24 the department's website, notifying the public that the pASC had been submitted.

26 Pursuant to OAR 345-015-0190(1), on May 30, 2014, the department determined the  
27 application to be incomplete and issued a Request for Additional Information (RAI-1). In  
28 accordance with the deadline provided by the department with its RAI-1, the applicant  
29 provided responses and revised exhibits on July 31, 2014. After reviewing the revised exhibits,  
30 the department determined the application to be complete on October 9, 2014 and the  
31 applicant filed a complete ASC on October 17, 2014. Under OAR 345-015-0190(5), an  
32 application is complete when the department finds that the applicant has submitted  
33 information adequate for the Council to make findings or impose conditions on all applicable  
34 Council standards.

36 Public notice of the ASC was issued on October 25, 2014, with notice posted in the East  
37 Oregonian on that same day. The department held a public information meeting on the ASC on  
38 November 19, 2014 in Umatilla County, Oregon. Substantive issues raised during the public  
39 information meeting related to a Council standard are addressed under the applicable Council

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<sup>36</sup> Order Appointing the City Council of the City of Umatilla as a Special Advisory Group, May 03, 2013.

1 standard of this final order. Matters raised but not within the jurisdiction of the Council or not  
2 related to a Council standard are not further addressed in this final order.

3 Pursuant to OAR 345-015-0200, the department distributed copies of the complete ASC to the  
4 reviewing agencies, along with a request for agency reports on the complete ASC no later than  
5 November 24, 2014. The department received comments from four reviewing agencies,  
6 including the Umatilla County Board of County Commissioners.

7  
8 On November 21, 2014, the Council appointed David Petersen as the hearing officer to conduct  
9 the public hearing on the ASC and to conduct the contested case proceeding.<sup>37</sup>

### 10 11 **III.C. Council Review Process**

12  
13 On April 14, 2015, the department issued the Draft Proposed Order (DPO) for public comment  
14 and a Notice of Public Hearing.<sup>38</sup> On May 14, 2015, Hearing Officer Petersen conducted the  
15 public hearing on the DPO in Hermiston, Oregon.<sup>39</sup> The record of the public hearing closed on  
16 May 14, 2015 at the conclusion of the public hearing, as provided in the public notice. The  
17 Council reviewed the DPO and comments received on the record of the public hearing at its  
18 regularly scheduled Council meeting on May 15, 2015.

19  
20 The department received a total of six comments on the record of the public hearing, including  
21 those received during the May 14 public hearing. Appendix F of this final order includes an  
22 index of comments on the DPO. Substantive issues raised in the comments on the DPO are  
23 discussed under the applicable standard(s) in Section IV of this final order.

24  
25 The department prepared the Proposed Order, taking into consideration the comments of the  
26 Council, comments received on the record of the public hearing ( i.e. oral testimony provided at  
27 the public hearing and written comments received before the close of the public hearing), and  
28 agency consultation. Concurrent with the issuance of the Proposed Order, the department  
29 issued a Notice of Contested Case and a Public Notice of the Proposed Order.<sup>40</sup> Only those  
30 persons who commented in person or in writing on the record of the public hearing could  
31 request to participate as a party or limited party in the contested case proceeding. Additionally,  
32 to have raised an issue in a contested case, the issue must have been within Council  
33 jurisdiction, and the person must have raised the issue on the record of the public hearing with  
34 "sufficient specificity to afford the Council, the department, and the applicant an adequate  
35 opportunity to respond."<sup>41</sup> The deadline for requesting party status in the contested case was  
36 5:00 pm on July 14, 2015. The date of the initial prehearing conference was scheduled for

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<sup>37</sup> Order Appointing Hearing Officer, November 21, 2014.

<sup>38</sup> PERAPPD031. Draft Proposed Order in the Matter of the Application for Site Certificate for the  
Perennial Wind Chaser Station.

<sup>39</sup> Council members Beyeler, Jenkins, Dowlin, Senn, and Billings attended the hearing in person.

<sup>40</sup> See ORS 469.370(4) and OAR 345-015-0014

<sup>41</sup> ORS 469.370(3).



1 August 3, 2015 at 2:00pm. The Notice of Contested Case was sent via certified mail to all  
2 persons who commented on the Draft Proposed Order. No requests for party status were  
3 received by the July 14 deadline. On July 21, 2015 the Hearing Officer issued an Order  
4 Concluding the Contested Case in the Matter of the Application for Site Certificate for the  
5 Perennial Wind Chaser Station.

6  
7 The Council considered the department's proposed order at a public meeting in Boardman,  
8 Oregon, on September 18, 2015 and issued this final order.

9  
10 This final order approves the ASC for the proposed Perennial Wind Chaser Station based upon  
11 the Council standards adopted pursuant to ORS 469.501, and any additional state statutes,  
12 rules, or local government ordinances determined to be applicable to the proposed facility in  
13 the project order.<sup>42</sup> Pursuant to ORS 469.403, parties to the contested case proceeding may  
14 appeal the Council's decision to the Oregon Supreme Court. Because there were no parties to  
15 the contested case, no party has standing to appeal this final order. .

#### 16 17 **IV. EVALUATION OF COUNCIL STANDARDS**

18  
19 As discussed above, ORS 469.320 requires a site certificate from the Energy Facility Siting  
20 Council (Council) before construction of a "facility." ORS 469.300(14) defines "facility" as an  
21 "energy facility together with any related or supporting facilities." The proposed Perennial  
22 Wind Chaser Station qualifies as an "energy facility" under the definition in ORS 469.300(11)(a).

23  
24 To issue a site certificate for a facility, the Council must determine that "the facility complies  
25 with the applicable standards adopted by the Council pursuant to ORS 469.501 or the overall  
26 public benefits of the facility outweigh any adverse effects on a resource or interest protected  
27 by the applicable standards that the facility does not meet."<sup>43</sup> The Council must also decide  
28 whether the proposed facility complies with all other applicable Oregon statutes and  
29 administrative rules, as identified in the project order, which excludes requirements governing  
30 design or operational issues that do not relate to siting<sup>44</sup> and compliance with requirements of  
31 federally-delegated programs.<sup>45</sup> Nevertheless, the Council may consider these programs in the  
32 context of its own standards to ensure public health and safety and protection of the  
33 environment.<sup>46</sup>

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<sup>42</sup> ORS 469.370(7).

<sup>43</sup> ORS 469.503(1).

<sup>44</sup> Such matters include design-specific construction or operation standards and practices that do not relate to siting, as well as matters relating to employee health and safety, building code compliance, wage and hour or other labor regulations, or local government fees and charges

<sup>45</sup> ORS 469.401(4); ORS 469.503(3).

<sup>46</sup> The Council does not have jurisdiction over matters that are not included in and governed by the site certificate or amended site certificate. However, the Council may rely on the determinations of compliance and the conditions in the permits issued by these state agencies and local governments in deciding whether the facility meets other standards and requirements under its jurisdiction.

1  
2 Under ORS 469.310, the Council is charged with ensuring that the “siting, construction and  
3 operation of energy facilities shall be accomplished in a manner consistent with protection of  
4 the public health and safety.” ORS 469.401(2) further provides that the Council must include in  
5 the site certificate “conditions for the protection of the public health and safety,” for the time  
6 for completion of construction, and to ensure compliance with the standards, statutes and rules  
7 described in ORS 469.501 and ORS 469.503.”<sup>47</sup> The Council implements this statutory  
8 framework and ensures the protection of public health and safety by adopting findings of fact,  
9 conclusions of law, and conditions of approval concerning the proposed facility’s compliance  
10 with the Council’s Standards for Siting Facilities at OAR 345, Divisions 22, 24, 26, and 27.

11  
12 This final order includes the Council’s findings of the proposed facility’s compliance with each  
13 applicable Council Standard (subject to mitigation and compliance with the conditions, as  
14 applicable), based on the information in the ASC, the department’s draft proposed order and  
15 proposed order, and the comments submitted on the record.

16  
17 **IV.A. General Standard of Review [OAR 345-022-0000]**

18  
19 *(1) To issue a site certificate for a proposed facility or to amend a site certificate, the*  
20 *Council shall determine that the preponderance of evidence on the record supports the*  
21 *following conclusions:*

22  
23 *(a) The facility complies with the requirements of the Oregon Energy Facility Siting*  
24 *statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards*  
25 *adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the*  
26 *facility outweigh any adverse effects on a resource or interest protected by the*  
27 *applicable standards the facility does not meet as described in section (2);*

28  
29 *(b) Except as provided in OAR 345-022-0030 for land use compliance and except for*  
30 *those statutes and rules for which the decision on compliance has been delegated by*  
31 *the federal government to a state agency other than the Council, the facility*  
32 *complies with all other Oregon statutes and administrative rules identified in the*  
33 *project order, as amended, as applicable to the issuance of a site certificate for the*  
34 *proposed facility. If the Council finds that applicable Oregon statutes and rules, other*  
35 *than those involving federally delegated programs, would impose conflicting*  
36 *requirements, the Council shall resolve the conflict consistent with the public interest.*  
37 *In resolving the conflict, the Council cannot waive any applicable state statute.*

38 \* \* \*

39  

---

<sup>47</sup> ORS 469.401(2).

1       (4) In making determinations regarding compliance with statutes, rules and ordinances  
2       normally administered by other agencies or compliance with requirement of the Council  
3       statutes if other agencies have special expertise, the Department of Energy shall consult  
4       such other agencies during the notice of intent, site certificate application and site  
5       certificate amendment processes. Nothing in these rules is intended to interfere with the  
6       state's implementation of programs delegated to it by the federal government.  
7

#### 8       IV.A.1. General Standard of Review 9

10      OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council  
11      to find that a preponderance of evidence on the record supports the conclusion that the facility  
12      complies with the requirements of the Oregon Energy Facility Siting statutes and the siting  
13      standards adopted by the Council and that the facility complies with all other Oregon Statutes  
14      and administrative rules identified in the project order, as amended, and as applicable to the  
15      issuance of a site certificate for the proposed facility.<sup>48</sup>  
16

17      As discussed above, as staff to the Council, the department consulted with other agencies  
18      during the NOI and ASC processes to aid in the evaluation of the proposed facility's compliance  
19      with statutes, rules and ordinances otherwise administered by other agencies. Additionally, the  
20      department relied upon the reviewing agencies' expertise in evaluating the facility's compliance  
21      with the requirements of the Council's standards, public comments on the DPO, and the  
22      Council's review and comments on the record of the DPO.  
23

#### 24      A. Certificate Expiration [OAR 345-027-0000] 25

26      Under OAR 345-015-0085(9), the site certificate is effective upon execution by the Council Chair  
27      and the applicant. ORS 469.370(12) requires the Council to "specify in the site certificate the  
28      date by which construction of the facility must begin." ORS 469.401(2) requires that the site  
29      certificate contain a condition "for the time for completion of construction." Under OAR 345-  
30      027-0000, the certificate holder must begin construction on the facility no later than the  
31      construction beginning date specified by Council in the site certificate. "Construction" is defined  
32      in ORS 469.300(6) to mean "work performed on a site, excluding surveying, exploration or other  
33      activities to define or characterize the site, the cost of which exceeds \$250,000." OAR 345-010-  
34      0010(12) adopts the statutory definition.  
35

36      The total construction time for the Station is expected to be 22 months, from mobilization to  
37      commencement of commercial operation. As explained in the ASC, the first two months of

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<sup>48</sup>When the applicant has shown that the proposed facility cannot meet Council standards or has shown that there is no reasonable way to meet the Council standards through mitigation or avoidance of any adverse effects on a protected resource or interest OAR 345-022-0000(2) and (3) establish criteria the Council may use to make a balancing determination. The applicant does not assert that the proposed facility cannot meet an applicable Council standard. Therefore, OAR 345-022-0000(2) and (3) do not apply to this review.

1 construction would include site preparation and grading work, with the next 16 months  
2 consisting of the majority of the impact from construction activities, such as traffic, noise, and  
3 demand for public services from nearby communities.

4  
5 The Council's findings on whether a proposed facility can meet any given Council standard must  
6 necessarily be based upon its findings of facts and conclusions of law at the time of the site  
7 certificate decision. Local and state regulations applicable to a facility, and the situation within  
8 the analysis area for the facility, can and will change over time. The chance of a change in a law  
9 or circumstance within the analysis area increases the further the construction date is set from  
10 the date the site certificate is issued.

11  
12 Therefore, to allow the applicant sufficient time to complete construction while also minimizing  
13 the potential for changes that could affect a Council finding, the Council approves a three year  
14 deadline for the applicant to begin construction, and three years for the applicant to complete  
15 construction. In compliance with OAR 345-027-0000 and OAR 345-027-0020(4), the Council  
16 adopts the following conditions:

17  
18 **Condition A.1:** The certificate holder shall begin construction of the facility within three  
19 years after the effective date of the site certificate. Under OAR 345-015-0085(9), the site  
20 certificate is effective upon execution by the Council chair and the applicant.

21  
22 **Condition A.2:** The certificate holder shall complete construction of the facility within six  
23 years after the effective date of the site certificate.

24  
25 *B. Mandatory Conditions in Site Certificates [OAR 345-027-0020]*

26  
27 OAR 345-027-0020 lists certain conditions that the Council must adopt in every site certificate.  
28 Some mandatory conditions directly implement a Council standard and are therefore applied in  
29 this final order within the discussion of the relevant standard. In addition, OAR 345-027-  
30 0020(10) requires that the Council include as conditions in the site certificate all  
31 representations in the ASC and supporting record the Council deems to be binding  
32 commitments made by the applicant. Those conditions are also applied within the discussion of  
33 the relevant standard. Mandatory conditions that are not otherwise addressed in the  
34 evaluation of compliance with specific standards are listed below. As stated in OAR 345-027-  
35 0020(1), "the Council shall not change the conditions of the site certificate except as provided  
36 for in OAR Chapter 345, Division 27."

37  
38 The following are mandatory conditions required pursuant to OAR 345-027-0020.

39  
40 **Condition A.3 [OAR 345-027-0020(2)]:** The certificate holder shall submit a legal description  
41 of the site to the Oregon Department of Energy within 90 days after beginning operation of  
42 the facility. The legal description required by this rule means a description of metes and

1 bounds or a description of the site by reference to a map and geographic data that clearly  
2 and specifically identify the outer boundaries that contain all parts of the facility.

3  
4 **Condition A.4 [OAR 345-027-0020(3)]**: The certificate holder shall design, construct,  
5 operate, and retire the facility:

6  
7 (a) Substantially as described in the site certificate;

8  
9 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules,  
10 and applicable state and local laws, rules and ordinances in effect at the time the site  
11 certificate is issued; and

12  
13 (c) In compliance with all applicable permit requirements of other state agencies.

14  
15 **Condition A.5 [OAR 345-027-0020(4)]**: The certificate holder shall begin and complete  
16 construction of the facility by the dates specified in the site certificate.

17  
18 **Condition A.6 [OAR 345-027-0020(5)]**: Except as necessary for the initial survey or as  
19 otherwise allowed for wind energy facilities, transmission lines or pipelines under this  
20 section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010,  
21 or create a clearing on any part of the site until the certificate holder has construction rights  
22 on all parts of the site. For the purpose of this rule, "construction rights" means the legal  
23 right to engage in construction activities. For wind energy facilities, transmission lines or  
24 pipelines, if the certificate holder does not have construction rights on all parts of the site,  
25 the certificate holder may nevertheless begin construction, as defined in OAR 345-001-  
26 0010, or create a clearing on a part of the site if the certificate holder has construction  
27 rights on that part of the site and the certificate holder would construct and operate part of  
28 the facility on that part of the site even if a change in the planned route of a transmission  
29 line or pipeline occurs during the certificate holder's negotiations to acquire construction  
30 rights on another part of the site.

31  
32 **Condition A.7 [OAR 345-027-0020(6)]**: If the certificate holder becomes aware of a  
33 significant environmental change or impact attributable to the facility, the certificate holder  
34 shall, as soon as possible, submit a written report to the department describing the impact  
35 on the facility and any affected site certificate conditions.

36  
37 **Condition A.8 [OAR 345-027-0020(11)]**: Upon completion of construction, the certificate  
38 holder shall restore vegetation to the extent practicable and shall landscape all areas  
39 disturbed by construction in a manner compatible with the surroundings and proposed use.  
40 Upon completion of construction, the certificate holder shall remove all temporary  
41 structures not required for facility operation and dispose of all timber, brush, refuse and

1 flammable or combustible material resulting from clearing of land and construction of the  
2 facility.

3  
4 **Condition A.9 [OAR 345-027-0020(15)]**: Before any transfer of ownership of the facility or  
5 ownership of the site certificate holder, the certificate holder shall inform the department  
6 of the proposed new owners. The requirements of OAR 345-027-0100 apply to any transfer  
7 of ownership that requires a transfer of the site certificate.

8  
9 *C. Site Specific Conditions [OAR 345-027-0023]*

10  
11 In addition to mandatory conditions imposed on all facilities, the Council rules also include “site  
12 specific” conditions at OAR 345-027-0023 that the Council may include in the site certificate to  
13 address issues specific to certain facility types or proposed features of facilities.

14  
15 Because the facility includes a lateral natural gas pipeline as a related and supporting facility,  
16 the Council adopts the following site specific conditions.

17  
18 **Condition A.10 [OAR 345-027-0023(2)]**: The certificate holder shall submit to the  
19 department copies of all incident reports involving the lateral natural gas pipeline required  
20 under 49 CFR § 191.15.

21  
22 **Condition A.11 [OAR 345-027-0023(3)]**:

23  
24 (a) The certificate holder shall design, construct and operate the lateral natural gas  
25 pipeline in accordance with the requirements of the U.S. Department of Transportation  
26 as set forth in Title 49 Code of Federal Regulations, Part 192, in effect as of the date of  
27 this rule; and

28  
29 (b) The certificate holder shall develop and implement a program using the best  
30 available practicable technology to monitor the proposed lateral natural gas pipeline to  
31 ensure protection of public health and safety.

32  
33 *D. Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]*

34  
35 The Council has also adopted rules at OAR Chapter 345, Division 26 to ensure that construction,  
36 operation, and retirement of facilities are accomplished in a manner consistent with the  
37 protection of the public health, safety, and welfare and protection of the environment. These  
38 rules include requirements for compliance plans, inspections, reporting and notification of  
39 incidents. The certificate holder must construct, operate, and retire the facility in accordance  
40 with all applicable rules adopted by the Council in OAR Chapter 345, Division 26.

41  
42 **IV.A.2. General Standard of Review: Conclusions of Law**

1  
2 Based on the foregoing findings and conclusions, and subject to compliance with the site  
3 certificate conditions, the Council finds that the facility satisfies the General Standard of  
4 Review.

5  
6 **IV.B. Organizational Expertise [OAR 345-022-0010]**  
7

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

20 *(2) The Council may base its findings under section (1) on a rebuttable presumption that*  
21 *an applicant has organizational, managerial and technical expertise, if the applicant has*  
22 *an ISO 9000 or ISO 14000 certified program and proposes to design, construct and*  
23 *operate the facility according to that program.*  
24

25 *(3) If the applicant does not itself obtain a state or local government permit or approval*  
26 *for which the Council would ordinarily determine compliance but instead relies on a*  
27 *permit or approval issued to a third party, the Council, to issue a site certificate, must*  
28 *find that the third party has, or has a reasonable likelihood of obtaining, the necessary*  
29 *permit or approval, and that the applicant has, or has a reasonable likelihood of entering*  
30 *into, a contractual or other arrangement with the third party for access to the resource*  
31 *or service secured by that permit or approval.*  
32

33 *(4) If the applicant relies on a permit or approval issued to a third party and the third*  
34 *party does not have the necessary permit or approval at the time the Council issues the*  
35 *site certificate, the Council may issue the site certificate subject to the condition that the*  
36 *certificate holder shall not commence construction or operation as appropriate until the*  
37 *third party has obtained the necessary permit or approval and the applicant has a*  
38 *contract or other arrangement for access to the resource or service secured by that*  
39 *permit or approval.*  
40

41 **IV.B.1. Organizational Expertise: Findings of Fact**  
42

1 To demonstrate compliance with the Council's Organizational Expertise Standard, the applicant  
2 provided evidence in the following exhibits: Exhibit A, Application Information; Exhibit D,  
3 Applicant's Organization, Managerial, and Technical Expertise; Exhibit E, Permits Needed for  
4 Construction and Operation; Exhibit M, Financial Analysis; and Exhibit W, Site Restoration.

5  
6 *A. Organizational Expertise to Construct, Operate and Retire the Proposed Facility*  
7

8 The applicant, Perennial-WindChaser LLC, is a wholly owned subsidiary of Perennial Power  
9 Holdings, Inc. Perennial Power Holdings, Inc. is a wholly owned subsidiary of Sumitomo  
10 Corporation and Sumitomo Corporation of America. Sumitomo Corporation of America owns  
11 49.99% of Perennial Power Holdings, Inc. (PPH) and Sumitomo Corporation owns 50.01%. These  
12 companies currently have a power portfolio of approximately 6,306 megawatts of electrical  
13 generation, including thermal generation, hydroelectric, wind, and solar energy across 17  
14 nations on five continents.<sup>49</sup>  
15

16 As evidenced from the current power portfolio, Perennial's parent companies have significant  
17 national and international experience. However, to demonstrate the parent companies' most  
18 relevant experience, Perennial relied upon a local facility to demonstrate past performance and  
19 the applicant's ability to operate the facility. PPH, Perennial's parent company, currently  
20 operates the Hermiston Generating Plant (HGP) in Umatilla County, Oregon through a  
21 subsidiary. As explained in the ASC, PPH was not involved in the construction of the facility, as  
22 the facility was constructed prior to PPH's acquisition. However, PPH now has over 11 years'  
23 experience staffing and operating the plant, which operates under a site certificate issued by  
24 EFSC. As explained in the ASC, the HGP has no outstanding regulatory issues with regard to  
25 environmental or occupational safety and health standards and maintains excellent relations  
26 with local residents.<sup>50</sup>  
27

28 While Perennial does not have direct experience with personnel for construction and operation  
29 of a facility, the ASC provides that the parent companies and subsidiaries do have substantial  
30 experience and would provide Perennial with qualified and experienced personnel to manage  
31 and supervise the design and construction of the project. As an example of the parent  
32 companies' personnel experience, the ASC highlights that PPH's Senior Vice President-  
33 Operations and Development has over 15 years' experience in the power and energy  
34 infrastructure industry and assists in the operation of the HGP Plant. The applicant would not  
35 use its own personnel for construction work; rather, it proposes to enter into a turnkey  
36 Engineering Procurement and Construction (EPC) contract with a contractor to construct the  
37 project. Perennial has retained Burns & McDonnell for the design phase of this project and, as  
38 explained in the ASC, Burns & McDonnell has over 45 years of experience with gas turbine  
39 generating facilities and would draft an EPC contract for Perennial that would serve as the basis

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<sup>49</sup> ASC, Exhibit D, D-2.

<sup>50</sup> ASC, Exhibit D, D-3.



1 for negotiations with a vendor.<sup>51</sup> Further, Perennial's parent companies would provide a Design  
2 Basis and Technical Specifications document in conjunction with the draft EPC contract.<sup>52</sup> As  
3 provided in the ASC, Perennial's parent companies' personnel will supervise and oversee the  
4 construction process.<sup>53</sup>

5  
6 The evidence in the record reflects that Perennial has the necessary experience to design and  
7 construct the facility. However, to ensure that personnel and major contractors are qualified to  
8 design, engineer and construct the proposed facility, and that all contractors and  
9 subcontractors operate in compliance with the site certificate, the Council adopts the following  
10 conditions:

11  
12 **Condition B.1:** Before beginning construction, the certificate holder shall provide the  
13 department with the identity and qualifications of the design, engineering and construction  
14 contractor(s) for the facility. The certificate holder shall select contractors that have  
15 substantial experience in the design, engineering and construction of similar facilities. The  
16 certificate holder shall report to the department any change in contractors during the  
17 design and construction of the facility.

18  
19 **Condition B.2:** The certificate holder must notify the department before conducting any  
20 work on the site that does not qualify as surveying, exploration, or other activities to define  
21 or characterize the site. The notice must include a description of the work and evidence that  
22 its value is less than \$250,000 or evidence that the applicant has satisfied all conditions that  
23 are required prior to beginning construction.

24  
25 **Condition B.3:** The certificate holder shall contractually require all construction contractors  
26 and subcontractors involved in the construction of the facility to comply with all applicable  
27 laws and regulations and with the terms and conditions of the site certificate. Such  
28 contractual provisions shall not relieve the certificate holder of responsibility under the site  
29 certificate.

30  
31 **Condition B.4:** Any matter of non-compliance under the site certificate is the responsibility  
32 of the certificate holder. Any notice of violation issued under the site certificate shall be  
33 levied on the certificate holder.

34  
35 While the applicant has not previously retired a facility, the applicant states in Exhibit W that it  
36 would restore the site to a useful non-hazardous condition in accordance with a retirement  
37 plan approved by Council.<sup>54</sup> Retirement of the facility is discussed further in the Retirement and  
38 Financial Assurance section below. To ensure that the applicant restores the site to a useful,

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<sup>51</sup> ASC, Exhibit D, D-4.

<sup>52</sup> ASC, Exhibit D, D-4.

<sup>53</sup> ASC, Exhibit D, D-4.

<sup>54</sup> ASC, Exhibit W, W-2.

1 non-hazardous condition, OAR 345-027-0020(7) requires that the Council adopt the following  
2 mandatory condition:

3  
4 **Condition B.5 [OAR 345-027-0020(7)]**: The certificate holder shall prevent the development  
5 of any conditions on the site that would preclude restoration of the site to a useful, non-  
6 hazardous condition to the extent that prevention of such site conditions is within the  
7 control of the certificate holder.

8  
9 Based on the information provided by the applicant and subject to compliance with the site  
10 certificate conditions, the Council finds that the applicant has the organizational expertise to  
11 construct, operate and retire the facility.<sup>55</sup>

12  
13 *B. ISO 900 or ISO 14000 Certified Program*

14  
15 Subsection (b) is not applicable because the applicant does not have an ISO 9000 or ISO 14000  
16 certified program.

17  
18 *C. Third-Party Permits*

19  
20 Perennial does not propose to rely on third party federal permits. However, it would rely on  
21 three third party state and local permits for the construction and operation of the facility. As  
22 explained in the ASC, the first third-party permit addresses water supply and the other two  
23 address reclaimed water generated by the station. For the first third party permit, Perennial will  
24 rely upon the Port of Umatilla's existing water right to supply it with up to 2,000 gallons of  
25 water per minute for the facility. The Port of Umatilla currently holds the existing right and no  
26 change to the permit or right would be necessary, as explained in a letter provided by the Port  
27 of Umatilla and included in the ASC. Therefore, based upon the information provided, because  
28 the Port of Umatilla currently holds the permit and provided a letter to Perennial expressing its  
29 ability to supply water to the Station, Perennial has demonstrated a reasonable likelihood of  
30 entering into a contractual agreement or other arrangement with the Port for access to the  
31 resource<sup>56</sup>.

32  
33 For the other third party permits, Perennial proposes to send reclaimed water from the facility  
34 to the HGP as makeup water for the HGP's cooling tower. The HGP operates under an EFSC site  
35 certificate. The HGP currently discharges its reclaimed water to Lamb Weston. Lamb Weston  
36 uses the reclaimed water for wash down or irrigation purposes and operates under a Water  
37 Pollution Control Facilities Permit. Perennial expects that the station would generate suitable  
38 wastewater for re-use as makeup at the HGP because cooling water at the station would be

---

<sup>55</sup> Additional mandatory conditions related to the retirement of the facility are discussed in Section G below.

<sup>56</sup> See Section IV.R, Ground Water, for additional discussion and conditions regarding the applicant's proposed reliance upon the Port of Umatilla's water right.

1 used inside the turbine equipment, which requires higher water quality specifications than  
2 cooling tower makeup water used at the HGP. Therefore, as explained in the ASC, HGP  
3 anticipates no difficulty in continuing to meet the requirements of its site certificate because of  
4 the anticipated high water quality to be sent from the proposed facility. However, renewal of  
5 Lamb Weston's WPCF permit is currently under review by DEQ. Because the permit is under  
6 review, Lamb Weston cannot yet consent to the project sending reclaimed water to the HGP.  
7 However, in the event Lamb Weston is not able to accept reclaimed water from the HGP that  
8 originated from the Station, the applicant has included the scenario and related third party  
9 permits in its ASC. In this instance, based upon the information provided, the third parties,  
10 (Lamb Weston and HGP) already have their permits. Accordingly, subject to Lamb Weston's  
11 ability to consent to receipt of the reclaimed water, it appears that the applicant has a  
12 reasonable likelihood of entering into a contractual or other arrangement with both parties for  
13 access to the services.

14  
15 However, to ensure all required permits are obtained prior to construction, the Council adopts  
16 the following conditions:

17  
18 **Condition B.6:** The certificate holder shall obtain all necessary federal, state and local  
19 permits or approvals required for construction, operation and retirement of the facility or  
20 ensure that its contractors obtain the necessary federal, state and local permits or  
21 approvals.

22  
23 **Condition B.7:** Before beginning construction, the certificate holder shall provide  
24 confirmation in writing to the department that the third parties have obtained all necessary  
25 permits or approvals and shall provide to the department proof of agreements between the  
26 certificate holder and the third parties regarding access to the resources or services secured  
27 by the permits or approvals.

28  
29 Based on this analysis and the evidence in the record, and subject to compliance with the site  
30 certificate conditions, the Council finds that the applicant has the organizational expertise to  
31 design, construct, and operate the facility in compliance with site certificate conditions and in a  
32 manner that protects public health and safety and has demonstrated the ability to restore the  
33 site to a non-hazardous condition. Further, the Council finds that the applicant has a reasonable  
34 likelihood of entering into a contract with third parties for access to the resources and services  
35 secured by those permits.

#### 36 37 **IV.B.2. Organizational Expertise: Conclusions of Law**

38  
39 Based on the foregoing findings and conclusions, and subject to compliance with the site  
40 certificate conditions, the Council finds that Perennial has the expertise to design, construct,  
41 and operate the facility in compliance with the Council's Organizational Expertise Standard.

1 **IV.C. Structural Standard [OAR 345-022-0020]**

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

5  
6 *(a) The applicant, through appropriate site-specific study, has adequately*  
7 *characterized the site as to the Maximum Considered Earthquake Ground Motion as*  
8 *shown for the site in the 2009 International Building Code and maximum probable*  
9 *ground motion, taking into account ground failure and amplification for the site*  
10 *specific soil profile under the maximum credible and maximum probable seismic*  
11 *events; and*

12  
13 *(b) The applicant can design, engineer, and construct the facility to avoid dangers to*  
14 *human safety presented by seismic hazards affecting the site that are expected to*  
15 *result from maximum probable ground motion events. As used in this rule "seismic*  
16 *hazard" includes ground shaking, ground failure, landslide, liquefaction, lateral*  
17 *spreading, tsunami inundation, fault displacement, and subsidence;*

18  
19 *(c) The applicant, through appropriate site-specific study, has adequately*  
20 *characterized the potential geological and soils hazards of the site and its vicinity*  
21 *that could, in the absence of a seismic event, adversely affect, or be aggravated by,*  
22 *the construction and operation of the proposed facility; and*

23  
24 *(d) The applicant can design, engineer and construct the facility to avoid dangers to*  
25 *human safety presented by the hazards identified in subsection (c).*

26  
27 *(2) The Council may issue a site certificate for a facility that would produce power from*  
28 *wind, solar or geothermal energy without making the findings described in section (1).*  
29 *However, the Council may apply the requirements of section (1) to impose conditions on*  
30 *a site certificate issued for such a facility.*

31  
32 *(3) The Council may issue a site certificate for a special criteria facility under OAR 345-*  
33 *015-0310 without making the findings described in section (1). However, the Council may*  
34 *apply the requirements of section (1) to impose conditions on a site certificate issued for*  
35 *such a facility.*

36  
37 **IV.C.1. Structural Standard: Findings of Fact**

38  
39 OAR 345-022-0020 requires the Council to find that the applicant has adequately characterized  
40 the potential seismic, geological and soil hazards of the site, and that the applicant can design,  
41 engineer and construct the facility to avoid dangers to human safety from these hazards. The

1 Council does not preempt the jurisdiction of any state or local government over matters related  
2 to building code compliance.

3  
4 Only the standards in OAR 345-022-0020(1)(a) through (d) apply to the proposed facility. OAR  
5 345-022-0020(2) and (3) do not apply to this application because the proposed facility would  
6 not produce power from wind, solar or geothermal energy and the facility is not a special  
7 criteria facility as defined in OAR 345-015-0310.

8  
9 As established in the project order, the analysis area for the structural standard is the area  
10 within the site boundary. As provided above, the site boundary, as defined by OAR 345-001-  
11 0010(53), is the area within the perimeter of the proposed energy facility, its related or  
12 supporting facilities, all temporary laydown and staging areas, and all microsites corridors  
13 proposed by the applicant. The applicant provided information regarding the seismic  
14 characteristics of the site and possible seismic and geological hazards in Exhibit H of the ASC.

15  
16 A. *Characterization of Seismic Hazards: OAR 345-022-0020(1)(a)*

17  
18 *The applicant, through appropriate site-specific study, has adequately characterized the*  
19 *site as to the Maximum Considered Earthquake Ground Motion as shown for the site in*  
20 *the 2009 International Building Code and maximum probable ground motion, taking into*  
21 *account ground failure and amplification for the site specific soil profile under the*  
22 *maximum credible and maximum probable seismic events*

23  
24 OAR 345-022-0020(1)(a) requires the applicant to adequately characterize the probability and  
25 severity of seismic events and ground failure at the site. The applicant contracted with Shannon  
26 & Wilson, Inc. to prepare a geologic report that meets the general guidelines in open file report  
27 00-04 "Guidelines for Engineering Geologic Reports and Site-Specific Seismic Hazard Reports."  
28 The report summarizes Shannon & Wilson's preliminary geotechnical investigation of the  
29 facility site, which was performed in June, July and August of 2013.<sup>57</sup> In addition, the applicant  
30 provided evidence of consultation with the Oregon Department of Geology and Mineral  
31 Industries (DOGAMI). As discussed in the ASC, the applicant met with DOGAMI to explain  
32 preliminary site-specific geologic explorations and evaluations performed at the site as well as  
33 to discuss available documentation for review.<sup>58</sup>

34  
35 As provided in the ASC, the preliminary site work conducted in 2013 included the installation of  
36 10 geotechnical borings, five dynamic cone penetrometer tests, and two infiltration tests at the  
37 Station and the installation of two geotechnical borings, four dynamic cone penetrometer tests,  
38 and two infiltration tests at the step-up substation. The preliminary geotechnical reports were  
39 included in the ASC as Appendices H-1 and H-2. As recommended in the reports, the applicant  
40 proposes to conduct additional geotechnical investigations in the final design phase that would

---

<sup>57</sup> ASC, Exhibit H, H-1.

<sup>58</sup> ASC, Exhibit H, H-3.

1 include field explorations, laboratory testing, and engineering studies and recommendations.  
2 Further, the field explorations would include additional borings for the final locations of the  
3 turbine/generators, access bridge, step-up substation, transmission towers and buried  
4 transmission cable.<sup>59</sup> In addition, a shear wave velocity measurement would be performed at  
5 the Station and step-up substation site. Additional engineering evaluations on the refined  
6 subsurface conditions will include:

- 7
- 8 • Refining or upgrading the seismic hazard evaluations and ground motion design  
9 parameters, including design response spectra.
- 10 • Estimating soil bearing capacity and settlement for the transformer foundation,  
11 transmission tower foundation, and other geotechnical evaluations based upon the final  
12 design layout and design loads.
- 13 • Developing geotechnical recommendations for trench excavation, shoring, and backfill  
14 of the buried transmission cable, as well as trenchless excavation techniques if required.  
15 Perennial has assumed that the embedment of the buried transmission cable is  
16 relatively shallow and that open trench excavation is the preferred construction  
17 method; however, trenchless excavation may be required to pass below existing railroad  
18 tracks.
- 19 • Completing a final geotechnical design report for the final design and construction.<sup>60</sup>
- 20

21 In order to ensure completion of the additional site specific studies, the Council adopts the  
22 following conditions:

23

24 **Condition C. 1:** Prior to beginning construction, the certificate holder shall complete  
25 additional geotechnical investigations, including field explorations and laboratory testing.  
26 The field explorations shall include additional borings for the final locations of the  
27 turbine/generators, access bridge, step-up substation, transmission towers and the buried  
28 transmission cable. Further, the site certificate holder shall perform a shear wave velocity  
29 measurement at the station and step-up substation sites.

30

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

- 33
- 34 (a) Refining the seismic hazard evaluations and ground motion design parameters,  
35 including design response spectra;
- 36 (b) Estimating soil bearing capacity and settlement for the transformer foundation  
37 transmission tower foundation, and other geotechnical evaluations based upon the final  
38 design layout and design loads;

---

<sup>59</sup> ASC, Exhibit H, H-1.

<sup>60</sup> ASC, Exhibit H, H-2.

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

The ASC includes a probabilistic seismic hazard analysis to identify peak ground accelerations expected at the site for a 500 year recurrence interval and a 5000 year recurrence interval in the ASC. The applicant relied on a probabilistic seismic hazard analysis developed by the USGS to estimate peak ground accelerations expected at the site.<sup>61</sup> As explained in the ASC, new construction that is designed according to the 2009 International Building Code (as required under Council rules), should be designed based upon the Maximum Considered Earthquake. The applicant provided the recommended seismic design parameters for the Maximum Considered Earthquake for each facility site in Table H-2 of the application.<sup>62</sup>

Under OAR 345-021-0010(1)(h)(F)(ii), the Council requires applicants to identify earthquake sources capable of generating median peak ground accelerations (PGA) greater than 0.5g on rock at the site and the applicant must assess the magnitude and minimum epicentral distance of the maximum credible earthquake. To fulfill this requirement, Perennial first identified the sources of potential seismic hazards at the site. As explained in Exhibit H, earthquakes typically occur in the Pacific Northwest as a result of the collision between the Juan de Fuca plate and the North American plates. These two plates meet along a thrust fault called the Cascadia Subduction Zone, which runs approximately parallel to the coastline from northern California to southern British Columbia. As further explained in Exhibit H, within present understanding of the regional tectonic framework and historical seismicity, three broad earthquake sources have been identified: the Subduction Zone Interface Earthquakes (Interplate); deep-focus, Intraplate Earthquakes (Intraslab); and Shallow-focus Crustal Earthquakes. Exhibit H describes each of the three earthquake sources and their maximum probable earthquakes, as determined by the 2010 Oregon Structural Specialty Code.<sup>63</sup>

In addition, the applicant identified and described the shallow crustal fault systems and folds that are located throughout Oregon and Washington and have been characterized by the USGS. As explained in the ASC, there are Class A fault systems and Class B fault systems within approximately 75 to 100 kilometers (50 to 60 miles) of the project site. Class A and B faults, according to geologic evidence published and the ASC, demonstrate the existence of Quaternary deformation, and therefore, the faults are correlated to a higher potential for earthquake generation. Class A and B names, general locations relative to the site, fault lengths, slip rates, and the time since their most recent deformation are summarized in Table H-3 and Table H-4 of the ASC.<sup>64</sup>

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<sup>61</sup> ASC, Exhibit H, H-5.

<sup>62</sup> ASC, Exhibit H, H-6.

<sup>63</sup> ASC, Exhibit H, H-6.

<sup>64</sup> ASC, Exhibit H, H-7.

The applicant calculated the maximum credible earthquake source magnitude and epicentral distance from the station site and step-up substation site, which are reproduced below.

**Table C-1 Maximum Credible Earthquake Source Magnitude and Epicentral Distance from the Station**

Earthquake Source	Maximum Moment Magnitude	Epicentral Distances (miles [km])
Random Hazard (WUS Shallow Gridded)	5.0	11 [16]
Crustal Faults	6.7 to 7.5	12 to 60 [20 to 100]
Intraslab	7.0	70 to 75 [110 to 120]
Interface	9.0	210 to 260 [340 to 420]
<b>Key:</b> Km = Kilometer; WUS = Western United States		

**Table C-2 Maximum Credible Earthquake Source Magnitude and Epicentral Distance from the Step-up Substation**

Earthquake Source	Maximum Moment Magnitude	Epicentral Distances (miles [km])
Random Hazard (WUS Shallow Gridded)	5.0	10 [16]
Crustal Fault	6.7 to 7.5	3 to 55 [5 to 90]
Intraslab	7.0	70 to 75 [110 to 120]
Interface	9.0	210 to 260 [340 to 420]
<b>Key:</b> Km—kilometers; WUS—Western United States		

The locations, approximate magnitude, and years of recorded earthquakes within 50 miles of the Station and step-up substation were included in Appendix H-1, Figure H-5 of the ASC. Further, a table summary of all recorded earthquakes that have caused ground shaking at the Station and step-up substation site more intense than the Modified Mercalli III intensity was provided in Appendix H-1, Attachment H-4.

As explained in Exhibit H, the deterministic MPE and MCE ground motion at each facility site resulting from an earthquake on the sources listed above in Tables C-1 and C-2 were estimated by the applicant using the maximum magnitude, minimum epicentral distance, and ground motion prediction equations (GMPE).<sup>65</sup> See Figures H6 and H7 in Attachment H-1. As discussed in Exhibit H, amplification of ground motion can occur in deep, soft soil profiles, or at sites located on top of an outcrop or basin. However, in this instance, the proposed project site is relatively flat ground, and the explored subsurface conditions primarily consist of dense to very dense sand and gravel. Based on these conditions, Perennial anticipates a low risk of

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<sup>65</sup> ASC, Exhibit H, H-11.



1 amplification that would result in ground motion greater than those characteristics identified in  
2 Table H-2.<sup>66</sup>

3  
4 Based upon the evidence provided, the Council finds that Perennial has adequately  
5 characterized seismic hazards that are expected to result from maximum probable ground  
6 motion events, and has relied on appropriate site-specific studies, taking into account ground  
7 failure and amplification for the specific site profile.

8  
9 *B. OAR 345-022-0020(1)(b)*

10  
11 *(b) The applicant can design, engineer, and construct the facility to avoid dangers to*  
12 *human safety presented by seismic hazards affecting the site that are expected to result*  
13 *from maximum probable ground motion events. As used in this rule "seismic hazard"*  
14 *includes ground shaking, ground failure, landslide, liquefaction, lateral spreading,*  
15 *tsunami inundation, fault displacement, and subsidence;*

16  
17 As provided in the ASC, based upon the location and topography of the Station and step-up  
18 substation site, preliminary site specific geotechnical explorations, and preliminary geotechnical  
19 engineering evaluation, there is a low risk of seismically induced ground failure, landslide,  
20 lateral spreading, liquefaction, tsunami inundation, fault displacement, and subsidence.  
21 Perennial anticipates that liquefaction is not a concern because the subsurface soils, as  
22 described in more detail in Exhibit I as well as the Exhibit H Appendices, include dense sands  
23 and gravel and very stiff to hard cohesive soils, with relatively deep ground water tables.<sup>67</sup>  
24 Liquefaction induced lateral spreading would thus not pose a risk because this type of  
25 subsurface profile does not meet the criteria for liquefaction to occur. Further, landslides are  
26 not a concern because the site is flat and there are no nearby slopes. The risks of ground failure  
27 and fault displacement is also low because, as discussed in Exhibit H, the site is more than 12  
28 miles from the nearest mapped fault.<sup>68</sup> Therefore, based upon the information provided, the  
29 risk of liquefaction, liquefaction induced lateral spreading, landslides and ground failure/fault  
30 displacement is low.

31  
32 While the ASC does identify ground shaking as a potential seismic hazard, the applicant  
33 proposes to design the facility to be able to resist ground shaking from an event with a 2,475  
34 year recurrence interval. Further, the applicant states that all structures at the facility would be  
35 designed to Site Class C specifications, in accordance with the site classification criteria in the  
36 International Building Code.<sup>69</sup> The loess layer for the Station site and the fine-grained alluvium  
37 silty sands at the step-up substation site have been found to be potentially collapsible or  
38 subject to strength loss. Therefore, the applicant proposes to remove these layers and to

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<sup>66</sup> ASC, Exhibit H, H-6.

<sup>67</sup> ASC, Exhibit H, H-13.

<sup>68</sup> ASC, Exhibit H, H-13.

<sup>69</sup> ASC, Exhibit H, H-13.

1 backfill the excavated area with structural fill. For lighter components, the applicant proposes  
2 to remove and backfill the upper 3 feet of the loess prior to the foundation being laid.<sup>70</sup>

3  
4 Because Perennial has identified ground shaking as a potential seismic hazard at the site, in  
5 order to ensure implementation of the safety design measures presented in the application, the  
6 Council adopts the following conditions:

7  
8 **Condition C.3:** The certificate holder shall design the facility to resist ground shaking from  
9 an event with a 2,475-year recurrence interval. All structures shall be designed in  
10 accordance with the Oregon Structural Special Code (2010) and the 2009 International  
11 Building Code.

12  
13 **Condition C.4:** Prior to beginning construction, the certificate holder shall submit a written  
14 plan, subject to approval by the department, for implementing soil improvement  
15 techniques identified in the geotechnical evaluation.

16  
17 In addition, the certificate holder is subject to the following mandatory condition:

18  
19 **Condition C.5 [OAR 345-027-0020(12)]:** The certificate holder shall design, engineer and  
20 construct the facility to avoid dangers to human safety presented by seismic hazards  
21 affecting the site that are expected to result from all maximum probable seismic events. As  
22 used in this rule, “seismic hazard” includes ground shaking, landslide, liquefaction, lateral  
23 spreading, tsunami inundation, fault displacement and subsidence.

24  
25 Based on the evidence in the record and subject to compliance with the above conditions, the  
26 Council finds that the certificate holder can design, engineer, and construct the facility to avoid  
27 dangers to human safety presented by seismic hazards affecting the site that are expected to  
28 result from maximum probable ground motion events.

29  
30 C. OAR 345-022-0020(1)(c) and (d)

31  
32 *(c) The applicant, through appropriate site-specific study, has adequately characterized*  
33 *the potential geological and soils hazards of the site and its vicinity that could, in the*  
34 *absence of a seismic event, adversely affect, or be aggravated by, the construction and*  
35 *operation of the proposed facility; and*

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

38  
39 In Exhibit H, the applicant describes potential non-seismic geological and soil hazards at the  
40 site. The applicant states that landslides and flooding are not anticipated because the site is flat

---

<sup>70</sup> ASC, Exhibit H, H-13.

1 and well above the 100-year flood elevations. The soils on site are classified as moderately  
2 erodible on the United State Soil Conservation Service mapping; however, as explained in the  
3 ASC, erosion is a low risk because the facility components would be generally founded on gravel  
4 and bedrock with surfaces paved or covered by gravel.<sup>71</sup> However, Perennial does identify  
5 collapsible soils, high winds and flash floods as potential hazards that could cause erosion of  
6 exposed soils. Consequently, to avoid the risks related to the potentially collapsible soils at the  
7 site, the applicant proposes to remove the potentially collapsible layers and backfill with  
8 structural fill. Based upon this identified hazard and the proposed mitigation measures, the  
9 Council adopts Condition C.5 above.

10  
11 Further, Perennial agrees to design facility components in accordance with the current  
12 construction codes to resist high wind loads and to revegetate exposed soils to resist erosion  
13 (revegetation requirements are discussed further below in consideration of the Council's Soil  
14 Standard). Grading and drainage facilities at the site will also be designed to accommodate  
15 runoff from flash floods.

16  
17 The following mandatory conditions ensure that characterizations used to design, engineer and  
18 construct the facility are updated to reflect any unexpected non-seismic hazards identified by  
19 future site investigations:

20  
21 **Condition C.6 [OAR 345-027-0020(13)]**: The certificate holder shall notify the department,  
22 the State Building Codes Division and the Department of Geology and Mineral Industries  
23 promptly if site investigations or trenching reveal that conditions in the foundation rocks  
24 differ significantly from those described in the application for a site certificate. After the  
25 department receives the notice, the Council may require the certificate holder to consult  
26 with the Department of Geology and Mineral Industries and the Building Codes Division and  
27 to propose mitigation actions.

28  
29 **Condition C.7 [OAR 345-027-0020(14)]**: The certificate holder shall notify the department,  
30 the State Building Codes Division and the Department of Geology and Mineral Industries  
31 promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in  
32 the vicinity of the site.

33  
34 Based upon the evidence provided above, and subject to compliance with the site certificate  
35 conditions, the Council finds that the applicant has adequately characterized the potential  
36 geological and soil hazards of the site and its vicinity, and further that the applicant can design,  
37 engineer and construct the facility to avoid dangers to human safety presented by the non-  
38 seismic hazards identified.

39  

---

71 ASC, Exhibit H, H-14.

1        IV.C.2. Structural Standard: Conclusions of Law

2  
3        Based on the foregoing findings and the evidence in the record, and subject to compliance with  
4        the site certificate conditions, the Council finds that the facility complies with the Council's  
5        Structural Standard.

6  
7        IV.D. Soil Protection [OAR 345-022-0022]

8  
9        *To issue a site certificate, the Council must find that the design, construction and operation of*  
10       *the facility, taking into account mitigation, are not likely to result in a significant adverse impact*  
11       *to soils including, but not limited to, erosion and chemical factors such as salt deposition from*  
12       *cooling towers, land application of liquid effluent, and chemical spills.*

13  
14       IV.D.1. Soil Protection: Findings of Fact

15  
16       The soil protection standard requires the Council to identify any significant adverse impact to  
17       soils, such as erosion and chemical factors. Construction and operation of the facility can  
18       adversely affect soils through erosion, compaction and chemical spills. Adverse impacts to soils  
19       can affect crop production on adjacent agricultural lands, native vegetation, fish and wildlife  
20       habitat, and water quality. Perennial provided information regarding potential soil impacts in  
21       Exhibit I of the ASC. The analysis area for the soil protection standard is the area within the site  
22       boundary.

23  
24       The area within the site boundary encompasses 60.15 acres, 23.48 acres of which would be  
25       permanently impacted and 36.67 acres temporarily impacted. As explained in the ASC, the  
26       exact locations of work areas (i.e. stringing sites) associated with the reconductoring of the  
27       transmission line have not yet been determined; however, the activities to occur at each  
28       stringing site would not include grading or other soil disturbing activities and all activities,  
29       including the pulling stations, would be located within the boundaries of the existing  
30       transmission line right of way. As explained in Exhibit I, Perennial's strategy for the construction  
31       of the transmission inter-ties, substation and natural gas lateral is to minimize the area of  
32       disturbance.<sup>72</sup>

33  
34  
35       *A. Existing Soil Conditions and Potential Impacts to Soil*

36  
37       Within the analysis area, Perennial identified four soil series, which contain a total of seven soil  
38       phases. Soil classes were identified using the Natural Resources Conservation Service soil survey  
39       program.<sup>73</sup> Generally, the erosion hazard for the soils found within the site boundary range  
40       from slight to moderate. As presented in the ASC, based upon the United States Geological

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<sup>72</sup> ASC, exhibit I, I-10.

<sup>73</sup> ASC, Exhibit I, I-3.

1 Survey Gap Analysis Program, the predominant land use categories in the analysis area, are  
2 classified as Agricultural Vegetation, Developed & Other Human Use, and Semi-Desert. Land  
3 uses within these areas include existing industrial uses, farm and agricultural uses and limited  
4 natural resource areas.<sup>74</sup>

5  
6 During construction, potential impacts could result from the removal of topsoil, wind or water  
7 erosion, contamination from oil or other spills from construction equipment, and potentially  
8 construction debris. Additionally, construction activities could increase the risk of invasive  
9 weeds by potentially transporting invasive weeds on construction equipment or by allowing  
10 invasive weeds to revegetate disturbed areas.<sup>75</sup> Due to the increased risk of introducing  
11 invasive weeds, soil quality could also be degraded from the application of specific herbicides, if  
12 used improperly.<sup>76</sup> As discussed in the ASC, potential soil erosion hazards during  
13 decommissioning would be similar to those that occur during construction. During operation,  
14 potential impacts could result from stormwater runoff, cooling tower plume impacts, sanitary  
15 sewage, and chemical or other hazardous material spills or leaks.

#### 16 17 *B. Measures to Mitigate Adverse Impacts to Soil*

##### 18 19 (a) Potential Soil Impacts from Erosion

20  
21 As stated in the ASC, during construction the applicant would take all measures necessary to  
22 ensure soil protection, including erosion control methods, and during construction the site  
23 certificate holder would be subject to compliance with a National Pollution Discharge  
24 Elimination System (NPDES) Stormwater Discharge General Permit #1200-C. The 1200-C permit  
25 is a federally-delegated permit outside Council jurisdiction issued by the Oregon Department of  
26 Environmental Quality (DEQ). Generally, NPDES 1200-C permits include the approval and  
27 implementation of an Erosion and Sediment Control Plan (ESCP) that governs erosion control  
28 during construction activities and require the use of best management practices during  
29 construction.

30  
31 Perennial submitted its NPDES 1200-C permit application to the DEQ on September 9, 2013 and  
32 included a copy of that application in Exhibit I of the ASC. Based on its evaluation of the NPDES  
33 permit application and associated ESCP, DEQ notified the department on February 6, 2014 that  
34 DEQ expects to be able to issue the NPDES 1200-C construction stormwater permit for the  
35 facility within 30 days of receiving the site certificate from the Council and review of the final  
36 version of the ESCP.

37  
38 As described in the ASC, the ESCP would include, but not be limited to, the following erosion  
39 control measures:

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<sup>74</sup> ASC, Exhibit I, I-5.

<sup>75</sup> ASC, Exhibit I, I-6.

<sup>76</sup> ASC, Exhibit I, I-6.

- Phase clearing and grading to the maximum extent practical to prevent exposed, inactive areas from becoming a source of erosion.
- Identify, mark, and protect (by fencing or other means) critical riparian areas and vegetation, including important trees and associated rooting zones and vegetation areas to be preserved. Identify vegetative buffer zones between the Site and sensitive areas, and other areas to be preserved.
- Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practical before and after grading or construction.
- Implement erosion and sediment control measures, including perimeter sediment control, which must be in place before vegetation is disturbed and must remain in place and be maintained, repaired, and promptly implemented following procedures established for the duration of construction, including protection for active storm drain inlets and catch basins an appropriate non-stormwater pollution control.
- Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses and for all roadways including gravel roadways.
- Establish material and waste storage areas and other non-stormwater controls.
- Use best management practices to prevent or minimize stormwater exposure to pollutants from spills, vehicle and equipment fueling, maintenance and storage, other cleaning and maintenance activities, and waste handling activities.
- Use water, a soil-binding agent, or other dust control techniques as needed to avoid windblown soil.
- Follow the manufacturers' recommendations for the application rate of fertilizers used to reestablish vegetation to minimize nutrient releases to surface waters.
- Temporarily stabilize soils at the end of the shift before holidays and weekends, if needed.
- Avoid or minimize excavation and creation of bare ground during wet weather.
- Sediment barrier: remove trapped sediment before it reaches specified heights and before barrier removal.
- Clean catch basins and sediment basins before retention capacity has been reduced by 50 percent.
- Clean up significant sediment that has left the construction site within 24 hours. Vacuuming or dry sweeping and material pickup must be used to clean up released sediments.
- Intentional washing of sediment into storm sewers or drainage ways is prohibited
- The entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding, or other method should all construction activities cease for 30 days or more.
- Provide temporary stabilization for any portion of the Site where construction activities cease for 14 days or more with a covering of blown straw and a tackifier, loose straw, or an adequate covering of compost mulch until work resumes on that portion of the Site.

- Provide permanent erosion control measures on all exposed areas. Do not remove temporary sediment control practices until permanent vegetation or other cover of exposed areas is established.

To ensure compliance with the ESCP and to further minimize the potential impacts to soils via erosion, the Council adopts the following conditions:

**Condition D.1:** The certificate holder shall conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination Systems (NPDES) #1200-C Construction Stormwater Discharge General Permit. The certificate holder shall include in the ESCP any measures necessary to meet local erosion and sediment control requirements or stormwater management requirements.

**Condition D.2:** During construction, the certificate holder must implement best management practices to control dust generated by construction activities, such as applying water to roads and disturbed soil areas.

Beyond the ESCP, Perennial has also developed a revegetation and noxious weed control plan to minimize the potential expansion of invasive weeds in disturbed areas, resulting from construction. According to the ASC, the Umatilla County Weed Control Board has reviewed and approved the plan.<sup>77</sup> Further, as noted above, since the application of specific herbicides may be necessary to control noxious weeds and because the improper use of herbicides has the potential to impact soil quality, Perennial proposes to minimize the likelihood of that impact by evaluating the need to use herbicides on a site-specific basis, by contracting with a licensed contractor to prescribe and apply treatments, if determined necessary, and by coordinating with each landowner prior to the application of herbicides. To ensure these proposed measures are undertaken and the spread of noxious weeds limited, the Council adopts the following conditions:

**Condition D.3:** To control the introduction and spread of noxious weeds, the certificate holder must implement the requirements of the approved Revegetation and Noxious Weed Control Plan during all phases of construction and operation of the facility. Amendments to the Revegetation and Noxious Weed Control Plan must be reviewed and approved by the Umatilla County Weed Control Board and submitted to the department no later than 30 days after approval.

**Condition D.4:** If herbicides are determined necessary, the certificate holder shall contract with a licensed contractor to prescribe and apply the proper treatments. Additionally, the certificate holder shall coordinate with each individual landowner prior to the application of

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<sup>77</sup> ASC, Exhibit I, I.6. The Umatilla County Weed Control Board has reviewed and approved the plan.

specific herbicides. The certificate holder shall submit to the department evidence of consultation with the landowners prior to application of the herbicides and evidence of a contract with a licensed contractor.

**Condition D.5:** During construction, the certificate holder shall limit truck traffic to improved road surfaces. Within 60 days of completing construction, the applicant shall mitigate any areas of soil compaction by measures to include scarification and reseeding.

In addition, mandatory condition A.8 [OAR 345-027-0020(11)], above, requires that upon completion of construction, the site certificate holder must restore vegetation to the extent practicable and to landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use, which would further minimize the potential for continued erosion as well as the spread of noxious weeds.

Based upon the evidence in the record, and subject to compliance with the above conditions, the Council finds that erosion resulting from the design, construction and operation of the facility is unlikely to result in a significant adverse impact to soils.

#### (b) Potential Soil Impacts from Spills

Perennial would store any hazardous material to be used at the facility on site. In order to minimize the chance of accidental releases into the environment and to prevent the contamination of soils, the applicant proposes to submit a Material Safety Data sheet for all hazardous chemicals to be used or stored by the construction contractor at or around the job site. The applicant offers to provide this data sheet to the Local Emergency Planning Committee and local fire department as well. In addition, the ASC states that a Spill Prevention Control and Countermeasure (SPCC) Plan would be prepared for use when the project commences operation.<sup>78</sup> The SPCC program is administered by the U.S. Environmental Protection Agency and requires facilities with over 1,320 gallons of aboveground oil storage capacity to develop and implement a SPCC Plan. An SPCC plan includes operating procedures to prevent oil spills, control measures such as secondary containment to contain spills, and countermeasure to contain, clean up and mitigate the effects of an oil spill. The SPCC Plan is only required to address potential spills of oil products and does not apply to hazardous materials or other chemicals. Therefore, the Council adopts the following conditions to ensure the department is able to monitor cleanup of any potential spills, to ensure adequate spill response procedures are implemented and to mitigate the impacts of any spill, should a spill occur:

**Condition D.6:** The certificate holder shall develop and implement a Hazardous Materials Management and Monitoring Plan (the Plan), which shall include and maintain a Materials Safety Data sheet for all hazardous chemicals stored onsite. The Plan shall contain best

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<sup>78</sup> ASC. Exhibit I, I-9.



management practices and hazardous waste training for construction and operation personnel. The certificate holder shall submit a copy of this plan to the department for review and approval prior to the commencement of construction of the facility.

**Condition D.7:** Prior to operation, the certificate holder shall develop a Spill Prevention Control and Countermeasure Plan for implementation during the facility's operation. The certificate holder shall submit a copy of this plan to the department prior to commencement of operation of the Station.

**Condition D.8:** If a reportable release of hazardous material occurs during construction or operation of the facility, the certificate holder shall notify the department within 72 hours of the occurrence, clean up the release, and dispose of any contaminated soil or other materials according to applicable regulations. The certificate holder shall make spill control and containment kits readily available in areas containing fuel oil, lubricating oil, hydraulic oil, and chemicals, as well as chemical unloading areas. The spill kits shall be equipped with sorbent pads, diatomaceous earth, shovels and appropriate hand tools, curtain booms if working near open water, personal protection equipment, and temporary waste disposal containers.

Based on evidence in the record, and subject to compliance with the conditions, the Council finds that spills resulting from the construction and operation of the facility are unlikely to result in a significant adverse impact to soils.

#### (c) Potential Impacts to Soil from Stormwater

As explained in the ASC, and as discussed above, during construction the applicant would be subject to compliance with the NPDES Stormwater Discharge General Permit #1200-C. In addition, stormwater would be directed away from construction areas and into sediment/detention basins to minimize offsite runoff. During operation, stormwater runoff would be diverted to a lined stormwater detention basin and allowed to infiltrate into the ground under the basin through gravity and natural drainage. Areas exposed to industrial activity would be routed through an oil/water separator before being routed to the basin and no stormwater would be discharged from the Station.<sup>79</sup> Diverting runoff to the stormwater basin would prevent stormwater from impacting the soils within the site boundary as well as soils outside the site boundary.

Based upon the evidence in the record, the Council finds that the design, construction and operation of the facility is unlikely to result in a significant adverse impact to soils from stormwater discharge.

---

<sup>79</sup> ASC, Exhibit I, Section I.5.

1 (d) Potential Soil Impacts from Salt Deposition from Cooling Towers

2  
3 Perennial discussed potential impacts from the cooling tower in Exhibit Z of the ASC. Based  
4 upon the Exhibit Z analysis, Perennial anticipates no potential adverse impacts warranting  
5 mitigation from operation of the cooling tower.<sup>80</sup> The proposed facility would utilize a  
6 mechanical-draft “wet” cooling tower. Mechanical-draft wet cooling towers force air into the  
7 cooling tower through a fine spray of heated water, where evaporation cools the water stream  
8 and transfers heat to the air. The warm air exhausts vertically, dispelling excess heat and when  
9 it comes into contact with the cooler ambient atmosphere, the water vapor condenses into fine  
10 water drops, creating a steam plume. As the plume cools and condenses, solids are deposited  
11 on the ground. Utilizing Seasonal/Annual Cooling Tower Impact (SACTI) modeling, the applicant  
12 assessed the deposition rates for salts. Based upon those results, the greatest salt deposition  
13 rates would occur within 200 meters of the cooling tower, all within the facility site boundary.<sup>81</sup>  
14 These soils would be at least partially covered by facility structures and artificial surfaces.  
15 Beyond the site boundary, deposition rates decrease rapidly and were modeled to be less than  
16 5 kilograms per square kilometer per month. The closest irrigation circles are 700 meters away,  
17 with the predicted deposition rates at that distance lower than 1 kilogram per square mile per  
18 month. As a point of comparison, Perennial notes that the average application rates of  
19 nitrogen-based fertilizers to agricultural fields in the Midwest are approximately 775 kilograms  
20 per square mile per month. Based upon the anticipated deposition rates provided, the Council  
21 agrees that there are no potential significant adverse impacts warranting mitigation to soils  
22 based upon impacts from salt deposition from the cooling tower.

23  
24 Based on the evidence in the record, the Council finds that salt deposition from cooling towers  
25 resulting from the design, construction and operation of the facility is not likely to result in a  
26 significant adverse impact to soils.

27  
28 *C. Monitoring*

29  
30 During construction, the applicant proposes to inspect the site boundary weekly at active  
31 construction areas and every two weeks at inactive areas. Additionally, the applicant proposes  
32 that both active and inactive sites would be inspected at least daily during periods when 0.5  
33 inches or more rain has fallen in a 24-hour period. After construction, the applicant proposes to  
34 landscape the area surrounding the site and return disturbed areas to their original contours.<sup>82</sup>  
35 As explained in the ASC, the applicant would monitor revegetated areas quarterly in the first  
36 year to ensure success of revegetation. To ensure appropriate monitoring occurs, the Council  
37 adopts the following condition:

38  
39 **Condition D.9:** During construction of the facility, the certificate holder must complete the

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<sup>80</sup> ASC, Exhibit I, Section I.5.

<sup>81</sup> ASC, Exhibit Z, Z-16.

<sup>82</sup> See mandatory condition OAR 345-027-0020(11).

1 following monitoring to ensure that there are no significant potential adverse impacts to  
2 soils:

3  
4 (a) During construction, the certificate holder shall monitor disturbed area erosion and  
5 sediment control measures at the active construction areas on a weekly basis and every  
6 two weeks on inactive areas. Inspection of both active and inactive areas must occur at  
7 least daily during periods when 0.5 inches or more rain has fallen in a 24-hour period.

8 (b) The certificate holder must remove trapped sediment when storage capacity has  
9 been reduced by 50 percent. Sediments shall be placed in an upland area certified by a  
10 qualified wetlands specialist.

11 (c) If the erosion and sediment control measures are deemed ineffective, different  
12 strategies and/or measures shall be implemented, maintained and monitored after  
13 consultation with the department.

14 (d) After completing construction in an area, the certificate holder must monitor the  
15 area until soils are stabilized and evaluate whether construction-related impacts to soils  
16 are being adequately addressed by the mitigation procedures described in the Erosion  
17 and Sediment Control Plan and the Revegetation and Noxious Weed Control Plan. As  
18 necessary, the certificate holder must implement follow-up restoration measures such  
19 as scarification and reseeding to address those remaining impacts.  
20

#### 21 IV.D.2. Soil Protection: Conclusions of Law

22  
23 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
24 the site certificate conditions, the Council finds that the facility complies with the Council's  
25 Siting Standards for Soil Protection.  
26

#### 27 IV.E. Land Use [OAR 345-022-0030]

28  
29 *(1) To issue a site certificate, the Council must find that the proposed facility complies*  
30 *with the statewide planning goals adopted by the Land Conservation and Development*  
31 *Commission.*  
32

33  
34 *(2) The Council shall find that a proposed facility complies with section (1) if:*

35 \*\*\*

36  
37 *(b) The Applicant elects to obtain a Council determination under ORS 469.504(1)(b)*  
38 *and the Council determines that:*  
39

40 *(A) The proposed facility complies with applicable substantive criteria as*  
41 *described in section (3) and the facility complies with any Land Conservation and*

1           *Development Commission administrative rules and goals and any land use*  
2           *statutes directly applicable to the facility under ORS 197.646(3);*

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

8  
9           *(C) For a proposed facility that the Council decides, under sections (3) or (6), to*  
10          *evaluate against the statewide planning goals, the proposed facility complies*  
11          *with the applicable statewide planning goals or that an exception to any*  
12          *applicable statewide planning goal is justified under section (4).*

13  
14          *(3) As used in this rule, the “applicable substantive criteria” are criteria from the affected*  
15          *local government’s acknowledged comprehensive plan and land use ordinances that are*  
16          *required by the statewide planning goals and that are in effect on the date the Applicant*  
17          *submits the application. If the special advisory group recommends applicable*  
18          *substantive criteria, as described under OAR 345-021-0050, the Council shall apply them.*  
19          *If the special advisory group does not recommend applicable substantive criteria, the*  
20          *Council shall decide either to make its own determination of the applicable substantive*  
21          *criteria and apply them or to evaluate the proposed facility against the statewide*  
22          *planning goals.*

23  
24          *(4) The Council may find goal compliance for a proposed facility that does not otherwise*  
25          *comply with one or more statewide planning goals by taking an exception to the*  
26          *applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide*  
27          *planning goal pertaining to the exception process or any rules of the Land Conservation*  
28          *and Development Commission pertaining to the exception process, the Council may take*  
29          *an exception to a goal if the Council finds:*

30  
31                  *(a) The land subject to the exception is physically developed to the extent that the*  
32                  *land is no longer available for uses allowed by the applicable goal;*

33  
34                  *(b) The land subject to the exception is irrevocably committed as described by the*  
35                  *rules of the Land Conservation and Development Commission to uses not allowed by*  
36                  *the applicable goal because existing adjacent uses and other relevant factors make*  
37                  *uses allowed by the applicable goal impracticable; or*

38  
39                  *(c) The following standards are met:*

40  
41                          *(A) Reasons justify why the state policy embodied in the applicable goal should*  
42                          *not apply;*

1  
2           (B) The significant environmental, economic, social and energy consequences  
3           anticipated as a result of the proposed facility have been identified and adverse  
4           impacts will be mitigated in accordance with rules of the Council applicable to  
5           the siting of the proposed facility; and

6  
7           (C) The proposed facility is compatible with other adjacent uses or will be made  
8           compatible through measures designed to reduce adverse impacts.

9           \* \* \*

10  
11           IV.E.1. Land Use: Findings of Fact

12  
13           Under OAR 345-021-0010(1)(k), an applicant must elect whether to address the Council's land  
14           use standard by obtaining local land use approvals under ORS 469.504(1)(a) or by obtaining a  
15           Council determination under ORS 469.504(1)(b). Perennial elected to have the Council make  
16           the land use determination under ORS 469.504(1)(b) and OAR 345-022-0030(2)(b). The  
17           applicant provided information about compliance with the Council's Land Use Standard in  
18           Exhibit K of the ASC.

19  
20           The Council must apply the land use standard in conformance with the requirements of ORS  
21           469.504. Under ORS 469.504(1)(b)(A), the Council may find compliance with statewide planning  
22           goals if the Council finds that the proposed facility "complies with applicable substantive  
23           criteria from the affected local government's acknowledged comprehensive plan and land use  
24           regulations that are required by the statewide planning goals and in effect on the date the  
25           application is submitted." Perennial submitted a preliminary application for site certificate on  
26           April 3, 2014 and the affected local governments are Umatilla County and the City of Umatilla.<sup>83</sup>  
27           In accordance with ORS 469.401(3), after issuance of a site certificate, Umatilla County and the  
28           City of Umatilla shall "upon submission by the applicant of the proper applications and the  
29           payment of proper fees, but without hearings or other proceedings" promptly issue the related  
30           permits and approvals, subject only to the conditions set forth in the site certificate.<sup>84</sup>

31  
32           The proposed facility is located entirely within Umatilla County. The energy facility site and  
33           natural gas pipeline would be located completely within unincorporated Umatilla County;  
34           however, the transmission line ROW includes sections within unincorporated Umatilla County  
35           as well as areas within the City of Umatilla Urban Growth Area (UGA) and in the City of  
36           Umatilla. The step-up substation and underground cable would be located in Umatilla County,  
37           within the City of Umatilla UGA, but outside the city limits. The City of Umatilla UGA is subject  
38           to the 1972 Umatilla County Zoning Ordinance.

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<sup>83</sup> OAR 345-021-0050((6)(b)(A) states that "For purposes of this rule, the application is submitted on the date that Department receives the preliminary application."

<sup>84</sup> Each state or local government agency that issues a permit, license or certificate continues to exercise enforcement authority over the permit, license or certificate.

The land use analysis begins with the identification of the “applicable substantive criteria.” The Council appointed the governing bodies of Umatilla County and the City of Umatilla as Special Advisory Groups (SAGs).<sup>85</sup> Pursuant to ORS 469.504(5), if the SAG recommends applicable substantive criteria for an energy facility or a related and supporting facility that does not pass through more than one local government jurisdiction or more than three zones in any one jurisdiction, the Council shall apply the criteria recommended by the special advisory group. If the SAG does not recommend applicable substantive criteria the Council may either determine and apply the applicable substantive criteria under subsection (1)(b) of ORS 469.504 or determine compliance with the statewide planning goals under ORS 469.504 (1)(b)(B) or (C) of this section. On September 23, 2013 the Umatilla County Board of County Commissioners submitted “applicable substantive criteria” for Umatilla County and confirmed those criteria in its May 5, 2014 comment letter on the preliminary application. Further, on November 24, 2014, the County submitted comments on the complete application and the proposed facility’s compliance with the previously identified applicable substantive criteria. The City of Umatilla also submitted comment on the preliminary application.<sup>86</sup> However, in its comment the City states that because the transmission line would be utilizing existing facilities and would pass through the City’s Urban Growth boundary, which is regulated by Umatilla County (1972 UCZO), the City of Umatilla would not require a conditional use permit for use of existing facilities and the City would not otherwise have any regulatory authority over this part of the project.<sup>87</sup>

The Council applied the applicable substantive criteria pursuant to ORS 469.504(1)(b)(A) as follows:

<b>Applicable Substantive Criteria</b>
Umatilla County Development Code §§ 152.055, 152.056, 152.059, 152.060, 152.615, 152.617, 152.061, 152.063; 152.301, 152.303, 152.304, 152.305, 152.306, 152.615, 152.616; 152.281, 152.283, 152.245, 152.285, 152.286; 152.615, 152.616; 152.612; 152.010, 152.011, 152.016, 152.017, 152.018, 152.545, 152.56, 152.562
Umatilla County Transportation System Plan

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<sup>85</sup>Order Appointing Special Advisory Groups, May 11, 2012; Order Appointing the City Council of the City of Umatilla as a Special Advisory Groups, May 03, 2013.

<sup>86</sup> The City notes that the because the transmission line would be located on existing facilities and would pass through the City’s Urban Growth boundary which is regulated by Umatilla County, the City of Umatilla would not require a conditional use permit because the use of existing facilities or would not otherwise have any regulatory authority over this part of the project. PERAPPDoc8.

<sup>87</sup> PERAPPDoc8.

Umatilla County Comprehensive Plan Policies:

Citizen Involvement Recommended Policies: 1, 5;

Agriculture Recommended Policies: 1, 8, 17;

Open Space, Scenic and Historic Areas, and Natural Areas Policies:  
1(a), 5(a & b), 6(a), 8(a), 9(a), 10(c, d & e), 20(b)(1-8), 23(a), 24(a),  
26, 37, 38(a-c), 39(a), 42(a);

Air, Land, Water Qualities Policies: 1, 7, 8;

Natural Hazards Policies: 1, 4;

Recreational Needs Policies: 1;

Economy of the County Policies: 1, 4, 8(a-f);

Public Facilities and Services Policies: 1(a-d), 2, 9, 19;

Transportation Policies: 18, 20;

Energy Conservation Policies: 1

1972 Umatilla County Zoning Ordinance (UCZO)

UCZO §§ 3.010; 3.012; 3.014; 3.016; 3.020; 3.024; 3.026; 2.140;;  
3.144; 3.146; 3.070; 3.072; 3.073; 7.010; 7.020; 7.040;

IV.E.1.a. Applicable Substantive Criteria - Umatilla County

**1. Zoning**

The energy facility site and natural gas pipeline would be located on land zoned Exclusive Farm Use (EFU) under the Umatilla County Development Code. The proposed transmission line would be located primarily on land zoned EFU and within the existing UEC transmission line ROW as the applicant is proposing to reconductor the line, utilizing the majority of the existing infrastructure.<sup>88</sup> However, portions of the transmission facilities would also cross small portions of land zoned Light Industrial (LI) and Rural Tourist Commercial (RTC) under the current UCDC.

**A. EFU, Exclusive Farm Use Zone**

**§152.055, Description and Purpose**

*The purposes of the EFU, Exclusive Farm Use Zone, are to preserve and maintain agricultural lands for farm use, including range and grazing uses, consistent with existing and future needs for agricultural products, forest and open spaces; to conserve and protect scenic resources; to maintain and improve the quality of air, water and land resources of the county and to establish criteria and standards for farm and non-farm uses and related and supportive uses which are deemed appropriate. It is also the purpose of this use zone to*

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<sup>88</sup> ASC, Exhibit K, K-7.

1 *provide the automatic farm use valuation for farms, which qualify under the provisions of*  
2 *ORS Chapter 308.*

3  
4 Pursuant to UCDC § 152.055, the purposes of the EFU zone are to preserve and maintain  
5 agricultural lands for farm use and to establish criteria and standards for farm and non-farm  
6 uses and related and supportive uses which are deemed appropriate. The comprehensive plan,  
7 therefore, does recognize non-farm development in areas designated as EFU. Furthermore,  
8 under UCDC §152.059(C), “utility facilities necessary for public service” are specifically  
9 permitted within EFU zones, while “commercial utility facilities for the purposes of generating  
10 power for public use by sale” are allowed as a conditional use under UCDC § 152.060(F).  
11 Additionally, the reconducted portions of the existing transmission line are permitted  
12 outright under UCDC § 152.056(J). Each of these provisions is discussed in more detail below.

### 13 14 **§152.056, Uses Permitted Outright**

15  
16 *In an EFU zone, the following uses and their accessory uses are permitted without a zoning*  
17 *permit, pursuant to § 152.007*

18 *\*\**

19  
20 *(J) Maintenance or minor betterment of existing transmission lines and facilities of utility*  
21 *companies and agencies.*

22  
23 As discussed in the ASC, reconductoring the proposed transmission line from a 115 kV to 230 kV  
24 is a minor betterment of an existing transmission line and, therefore, is permitted outright,  
25 without a zoning permit. However, UCDC § 152.056 is only applicable to the reconducted  
26 portions of the line and not to the potential six new poles (worst case scenario) proposed as  
27 necessary to tie-in to the existing transmission infrastructure.<sup>89</sup> From the tie-in, the facility’s  
28 reconducted 230kV line would run for approximately 11.59 miles before terminating at the  
29 step-up substation, discussed below. The total area to be impacted, temporarily, by the  
30 reconductoring activities would be approximately 1.38 acres. Based upon the evidence  
31 provided, the Council finds that the reconducted portions of the transmission line qualify as a  
32 use permitted outright under UCDC § 152.056(J) and thus do not require a zoning permit.

### 33 34 **§152.059, Land Use Decisions**

35  
36 *In an EFU zone the following uses may be permitted through a land use decision via*  
37 *administrative review (§ 152.769) and subject to the applicable criteria found in §152.617.*  
38 *Once approval is obtained a zoning permit (§ 152.025) is necessary to finalize the decision.*

39 *\*\*\**

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40  
<sup>89</sup> Three new transmission towers are proposed to be constructed in the EFU zone at the energy facility site.



1 (C) Utility facilities necessary for public service, including wetland waste treatment systems  
2 but not including commercial facilities for the purpose of generating electrical power for  
3 public use by sale or transmission or communication towers over 200 feet in height. A utility  
4 facility necessary for public service may be established as provided in ORS 215.275 and in §  
5 152.617 (II) (7).  
6

7 The natural gas pipeline and the new transmission poles associated with the new transmission  
8 line qualify as “utility facilities necessary for public service.”<sup>90</sup> The new natural gas pipeline, as  
9 described above, is a new pipeline lateral to be built within an existing 50-foot natural gas right-  
10 of-way and is approximately 4.63 miles long. As discussed above, the transmission line is,  
11 predominately, a proposed reconductored line, which would require up to six new poles to tie  
12 into the existing infrastructure. However, only three of the potential six new poles (worst-case  
13 scenario) would be constructed on EFU land at the energy facility site.<sup>91</sup>  
14

15 Pursuant to UCDC Section 152.159(C), a utility facility necessary for public service may be  
16 permitted in an EFU zone through a land use decision via administrative review and a utility  
17 facility necessary for public service may be established as provided in ORS 215.275 and UCDC §  
18 152.617(II)(7) (Section 152.617 (II)(7)mirrors the statutory requirements provided at ORS  
19 215.275).Under ORS 215.283(1)(c), “utility facilities necessary for public service” are permitted  
20 in EFU zones.<sup>92</sup> ORS 215.283(1)(c) operates in conjunction with ORS 215.275. Under ORS  
21 215.275(1), a utility facility authorized by ORS 215.283(1)(c) is necessary for public service if it  
22 must be sited in an exclusive farm use zone in order to provide the service. Further, ORS  
23 215.275(2) states that to demonstrate that a utility facility is necessary for public service, the  
24 applicant must show that reasonable alternatives have been considered and that the facility  
25 must be sited in an EFU zone due to one or more of the factors listed in the statute and  
26 provided below:<sup>93</sup>  
27

28 **ORS 215.275(2)**  
29

---

<sup>90</sup> The step-up substation and underground line would also qualify as “utility facilities necessary for public service,” however, the step-up substation and underground line, while located in Umatilla County, are within the City of Umatilla UGA and outside city limits. Therefore, they are subject to the 1972 Umatilla County Zoning Ordinance.

<sup>91</sup> ASC, Exhibit K, K-20.

<sup>92</sup> ORS 215.283 Uses permitted in exclusive farm use zones in nonmarginal lands counties

(1) The following uses may be established in any area zoned for exclusive farm use:

(c) Utility facilities necessary for public service, including wetland waste treatment systems but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height. A utility facility necessary for public service may be established as provided in:

(A) ORS 215.275 (Utility facilities necessary for public service)...

<sup>93</sup> The Oregon Land Use Board of Appeals recently confirmed that a county may only apply the criteria of ORS 215.275 to a “utility facility necessary for public service.” *WKN Chopin, LLC vs. Umatilla County, LUBA No. 2012-016( July 11, 2012).*

1       (2) To demonstrate that a utility facility is necessary, an applicant for approval under  
2       ORS 215.213(1)(c) or 215.283(1)(c) must show that reasonable alternative have been  
3       considered and that the facility must be sited in an exclusive farm use zone due to one or  
4       more of the following factors:

5  
6       (a) Technical and engineering feasibility;

7  
8       (b) The proposed facility is locationally dependent. A utility facility is locationally  
9       dependent if it must cross lands in one or more areas zoned for exclusive farm use in  
10      order to achieve a reasonably direct route or to meet unique geographical needs  
11      that cannot be satisfied on other lands;

12  
13      (c) Lack of available urban and non-resource lands;

14  
15      (d) Availability of existing rights-of-way;

16  
17      (e) Public health and safety; and

18  
19      (f) Other requirements of state or federal agencies.  
20

21      Generally, as explained in the ASC, the route for the natural gas pipeline, which utilizes an  
22      existing natural gas pipeline ROW, provides the most direct route between the energy facility  
23      site and the interconnecting pipeline. Any alternative routes in the area would necessarily be  
24      longer and would still require EFU-zoned lands to be crossed. Likewise, there are no alternative  
25      routes for the transmission line from the energy facility site to the McNary substation that  
26      would not need to cross EFU-zoned lands.

27  
28      (2)a. Technical and Engineering feasibility  
29

30      As explained in the ASC, the current use and proposed continued use of existing ROW's for both  
31      the natural gas pipeline and transmission line demonstrate that these are technically feasible  
32      routes for siting the pipeline and transmission line, respectively. While other routes may also be  
33      feasible, any other routes would require greater additional impacts because the existing ROW's  
34      would not be used.

35  
36      (2)b. The proposed facility is locationally dependent. A utility facility is locationally  
37      dependent if it must cross lands in one or more areas zoned for exclusive farm use in order  
38      to achieve a reasonably direct route or to meet unique geographical needs that cannot be  
39      satisfied on other lands;  
40

41      The natural gas pipeline is locationally dependent because, as explained in the application,  
42      there is no alternative route to deliver natural gas to the Station that would avoid EFU lands. In

1 addition, the proposed pipeline route would minimize impacts on EFU lands by utilizing the  
2 existing natural gas pipeline ROW.<sup>94</sup>

3  
4 EFU lands lie between the energy facility site and the McNary substation and all other  
5 substations in proximity to the Station.<sup>95</sup> Therefore, the transmission line is also locationally  
6 dependent because there is no alternative route, direct or indirect, that would avoid EFU lands  
7 entirely.

8  
9 *(2)c. Lack of available urban and non-resource lands*

10  
11 As explained in the ASC, the majority of Umatilla County is composed of rural resource lands.  
12 Therefore, because of the route of the existing GTN natural gas pipeline, there is no practicable  
13 way to site the natural gas lateral to avoid resource lands.<sup>96</sup> Further, it would not be  
14 practicable to site the new transmission line to McNary Substation to avoid resource lands. The  
15 proposed route minimizes the impact of the proposed transmission line on resource lands  
16 because it utilizes the existing infrastructure.<sup>97</sup>

17  
18 *(2)d. Availability of existing rights-of-way*

19  
20 As discussed above, the proposed natural gas pipeline and transmission line would utilize the  
21 existing ROW's. The entire length of the natural gas pipeline would be located within the  
22 existing ROW and the transmission line would require only a new 215-foot, 100-foot wide ROW  
23 to tie-in the Station to the existing infrastructure. As provided in the ASC, the use of existing  
24 rights of ways was a key consideration in the proposed route. The use of the existing ROW's  
25 substantially minimizes the impact of the proposed facilities on agricultural land.

26  
27 *(2)e. Public health and safety*

28  
29 For the natural gas pipeline, the existing ROW traverses minimally occupied EFU land, which  
30 reduces the potential for public health and safety impacts. Additionally, as explained in the ASC,  
31 the impacts to public health and safety would be further minimized because the pipeline would  
32 comply with the federal safety natural gas pipeline safety standards of 49 CFR part 192. In  
33 addition, the transmission line must comply with the Council's Siting Standards for Transmission  
34 Lines at OAR 345-024-0090, which is discussed in more detail below.

35  
36 For the foregoing reasons, the Council finds that the applicant has complied with the  
37 requirements of ORS 215.275(2) and that the proposed utilities necessary for public service  
38 must be sited on EFU land.

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<sup>94</sup> ASC, Exhibit K, K-12.

<sup>95</sup> ASC, Exhibit K, K-13.

<sup>96</sup> ASC, Exhibit K, K-13.

<sup>97</sup> ASC, Exhibit K, K-13.

1  
2 *ORS 215.275(3) Costs associated with any of the factors listed in subsection (2) of this*  
3 *section may be considered, but cost alone may not be the only consideration in determining*  
4 *that a utility facility is necessary for public service. Land costs shall not be included when*  
5 *considering alternative locations for substantially similar utility facilities. The Land*  
6 *Conservation and Development Commission shall determine by rule how land costs may be*  
7 *considered when evaluating the siting of utility facilities that are not substantially similar.*  
8

9 ORS 215.275(3) provides that cost may be a consideration associated with any of the factors  
10 listed in subsection (2) but that it may not be the only consideration. As explained in the ASC,  
11 the costs of developing both the natural gas pipeline and transmission line are anticipated to be  
12 significantly lower than any alternative alignment, not because the proposed route is on land  
13 zoned for EFU but rather because the proposed alignment is direct and located within an  
14 existing ROW. Further, the cost savings of the proposed route transmission line are greater than  
15 any other alternative alignment because the facility would utilize existing infrastructure and  
16 would utilize an existing alignment.<sup>98</sup> Consequently, based on the above, the Council finds that  
17 cost is not the only consideration associated with any of the factors listed under subsection (2)  
18 and the facility complies with ORS 215.275(3).  
19

20 *ORS 215.275(4) The owner of a utility facility approved under ORS 215.213 (Uses permitted*  
21 *in exclusive farm use zones in counties that adopted marginal lands system prior to 1993)*  
22 *(1)(c)(A) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal lands*  
23 *counties) (1)(c)(A) shall be responsible for restoring, as nearly as possible, to its former*  
24 *condition any agricultural land and associated improvements that are damaged or*  
25 *otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility.*  
26 *Nothing in this section shall prevent the owner of the utility facility from requiring a bond or*  
27 *other security from a contractor or otherwise imposing on a contractor the responsibility for*  
28 *restoration.*  
29

30 Under ORS 215.275(4), the owners of a utility facility must be responsible for restoring, as  
31 nearly as possible, to its former condition, any agricultural land and associated improvements  
32 that are damaged or otherwise disturbed. Perennial provided plans for such restoration in  
33 Exhibit W of the ASC, and the Council adopts conditions of approval to ensure site restoration is  
34 completed consistent with the requirements of the Council's standards in Section IV.G of this  
35 order.  
36

37 *ORS 215.275(5) The governing body of the county or its designee shall impose clear and*  
38 *objective conditions on an application for utility facility siting under ORS 215.213 (Uses*  
39 *permitted in exclusive farm use zones in counties that adopted marginal lands system prior*  
40 *to 1993) (1)(c)(A) or 215.283 (Uses permitted in exclusive farm use zones in nonmarginal*

---

<sup>98</sup> ASC, Exhibit K, K-15.

lands counties) (1)(c)(A) to mitigate and minimize the impacts of the proposed facility, if any, on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmlands.

ORS 215.275(5) states that the reviewing body shall impose clear and objective conditions of approval on the application to mitigate the impacts. As explained in the ASC, the development of the natural gas pipeline and the transmission line would not cause a significant change in accepted farm practices or a significant increase in the cost of farm practices on surrounding farmlands. The surrounding agricultural lands utilize center pivot irrigation, and accepted farm practices include soil preparation, sowing, fertilizing, pest and weed management, and harvesting. Necessary inputs include labor, fertilizer, electricity and water.<sup>99</sup> As described in the ASC, the pipeline would be buried below-ground and would not physically interfere with irrigation, fertilization or crop harvesting on surrounding center-pivot fields.<sup>100</sup> In addition, Condition H.3 requires that following construction, all areas temporarily impacted be returned to preconstruction conditions or better. The transmission line would require only three new poles to be located within lands zoned EFU, and the poles would be located at the energy facility site. Therefore, the transmission line will not interfere with the ability to irrigate, fertilize or harvest crops on surrounding center-pivot fields and will not affect the costs of the inputs. The development of the transmission line and gas pipeline, will not impair the ability of the workers to access surrounding farmlands.

The provisions of ORS 215.275(6) do not apply to the proposed facility.

Based upon the foregoing analysis, the Council finds that the provisions of ORS 215.275 are met and the natural gas pipeline and proposed transmission towers associated with the line are uses permitted in the exclusive farm use under Section 152.059(C) because they are “utility facilities necessary for public service.”

#### **UCDC §152.060, Conditional Uses Permitted<sup>101</sup>**

*In an EFU zone the following uses may be permitted conditionally via administrative review (§152.769), subject to the requirements of this section, the applicable criteria in § 152.061, §§ 152.610 through 152.615, 152.617 and §§ 152.545 through 152.562. A zoning permit is required following the approval of a conditional use pursuant to § 152.025.*

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<sup>99</sup> ASC, Exhibit K, K-20.

<sup>100</sup> ASC, Exhibit K, K-21.

<sup>101</sup> Consistent with Goal 3 of the Statewide Planning Goals, Umatilla County has designated the Exclusive Farm Use zone to preserve agricultural land. Under Goal 3, non-farm uses are permitted within a farm use zone as provided under ORS 215.283. ORS 215.283(2)(g) authorizes “commercial utility facilities for the purpose of generating power for public use by sale” on land in an Exclusive Farm Use zone, subject to the ORS 215.296.

1 \*\*\*

2  
3 *(F) Commercial utility facilities for the purpose of generating power for public use by sale as*  
4 *provided in § 152.617 (I) (C).*

5  
6 Section 152.060 lists land uses that may be permitted conditionally via administrative review in  
7 the County's EFU zone. Generally, a "commercial utility facility for the purpose of generating  
8 power for public use by sale" is an allowable use, subject to the conditional use standards in  
9 Sections 152.610 through 152.615; Section 152.617; and Sections 152.545 through 152.562.  
10 The energy facility is proposed to be located in the EFU zone and the energy facility is a  
11 proposed commercial utility facility for the purpose of generating power for public use by sale  
12 under UCDC 152.060(F). This section applies only to the Perennial Wind Chaser 'energy facility'  
13 and related energy facility components and it does not apply to the new natural gas pipeline  
14 and transmission line, as they are subject to the requirements discussed above.

15  
16 **UCDC §152.617, Standards for Review: Conditional Uses and Land Use Decisions on EFU and**  
17 **GF Zoned Lands**

18  
19 *(I) EFU AND GF ZONE CONDITIONAL USES*

20 \*\*\*

21 *(C) Commercial Utility Facilities. Commercial utility facilities for the purposes of generating*  
22 *and distributing power for public use by sale. Such facilities shall include, but are not limited*  
23 *to, electrical substations, power trams, water storage tanks, sewage disposal facilities,*  
24 *water treatment facilities, towers or transmitting facilities for radar and television, and*  
25 *dams. This does not include Wind Power Generation Facility (See specific criteria, Section*  
26 *152.616 (HHH), or local distribution lines for sewer, water, gas, telephone, and power and*  
27 *similar minor facilities. These uses are allowed provided that:*

28  
29 *(1) Facility is designed to minimize conflicts with scenic values and adjacent forest,*  
30 *farming and recreational uses as outlined in policies of the Comprehensive Plan;*

31  
32 The energy facility is a "commercial utility facility for the purposes of generating and  
33 distributing power for public use by sale." The permanent impacts associated with the energy  
34 facility are less than 20 acres. As explained in the ASC and discussed below regarding the  
35 Council's Scenic Resources Standard, the proposed energy facility would not significantly impact  
36 any identified scenic values and is designed to minimize the visual impact of the energy facility.  
37 In addition, Condition J.1 requires the facility to be painted using neutral colors with low  
38 reflectivity finish thereby reducing visual contrast and glare. Further, as provided in the  
39 Umatilla County Board of County Commissioner comment on the complete application, there  
40 are no inventoried Goal 5 significant visual resources in the vicinity of the project site.<sup>102</sup>

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<sup>102</sup> PERAPDOC Umatilla county comment

1  
2 There are no forest or recreational uses adjacent to the energy facility and therefore there is no  
3 potential for conflict with such uses. The facility's ability to comply with the Council's  
4 Recreational Standard is discussed in more detail below.  
5

6 According to the ASC, the surrounding agricultural land utilizes center pivot irrigation and the  
7 accepted farm practices include soil preparation, sowing, fertilizing, pest and weed  
8 management, and harvesting. The construction and operation of the proposed energy facility  
9 would not change these accepted farm practices or affect the availability or costs of the  
10 necessary inputs as the Station would not physically interfere with irrigation, fertilization, or the  
11 harvesting of crops on surrounding center-pivot fields. Further, as provided in the ASC, the  
12 operations of the Station will not conflict or impact the obtainment or application of fertilizer,  
13 irrigation water, pesticides or other necessary crop inputs. As described in the Exhibit Z of the  
14 ASC, the cooling tower drift will not impact the quality or productivity of soils on surrounding  
15 farmlands as the rate of deposition of salts on the nearest crops is anticipated to be  
16 substantially below the threshold at which stress symptoms are demonstrated.<sup>103</sup> Therefore,  
17 additional inputs will not be necessary because the facility's cooling tower drift and the  
18 associated costs would not increase to due facility operation.  
19

20 Based upon the information provided, the Council finds that the energy facility is designed to  
21 minimize conflicts with scenic values and adjacent forest, farming and recreational uses.  
22

23 *(2) Facility be of a size and design to help reduce noise or other detrimental effects when*  
24 *located adjacent to farm, forest and grazing dwellings(s) or a recreational residential*  
25 *zone;*  
26

27 This provision is not applicable to the proposed energy facility because no farm, forest,  
28 grazing dwellings or recreational residential zones are located adjacent to the energy  
29 facility site.  
30

31 *(3) Facility be fenced when located adjacent to dwelling(s) or a Mountain Recreational*  
32 *or Forest Residential Zone and landscaping, buffering and/or screening be provided;*  
33

34 This provision is not applicable to the proposed energy facility because the facility site is not  
35 located adjacent to dwellings or a Mountain Recreational or Forest Residential Zone.  
36 Notwithstanding, the applicant proposes to fence the energy facility site.  
37

38 *(4) Facility does not constitute an unnecessary fire hazard and consideration be made of*  
39 *minimum fire safety measures if located in a forested area, which can include, but is not*  
40 *limited to:*

---

<sup>103</sup> ASC, Exhibit K, K-17.

- 1  
2 *(a) The site be maintained free of litter and debris;*  
3 *(b) Use of non-combustible or fire retardant treated materials for structures and*  
4 *fencing;*  
5 *(c) Removal of all combustible materials within 30 feet of structures.*  
6

7 As explained in the ASC, the energy facility would not constitute an unnecessary fire hazard.  
8 The energy facility would be kept free of litter and debris and maintained clear of combustible  
9 materials within 20 feet of structures, except as necessary for Station operation. The applicant  
10 proposes to utilize non-combustible or fire retardant treated materials for structures and  
11 fencing as well as include a fire detection and protection system. In addition, Condition M.7,  
12 requires the certificate holder to develop and implement a fire protection system. Further,  
13 however, the Council adopts the following condition to ensure fire retardant materials are  
14 utilized as stated in the ASC:  
15

16 **Condition E.1:** The certificate holder shall utilize fire retardant treated or non-combustible  
17 materials for all structures and fencing at the facility. In addition, the site shall be  
18 maintained clear of combustible materials within 20 feet of structures, except as necessary  
19 for Station operation. The certificate holder shall ensure that trees and other vegetation do  
20 not grow to become a fire hazard.  
21

- 22 *(5) Major transmission towers, poles and similar gear shall consider locations within or*  
23 *adjacent to existing rights-of way in order to take the least amount of timber land out of*  
24 *production and maintain the overall stability and land use patterns of the area, and*  
25 *construction methods consider minimum a soil disturbance to maintain water quality;*  
26

27 As discussed above, the transmission line associated with the facility is a use permitted within  
28 the EFU zone. Nonetheless, the transmission line will be located within the existing ROW,  
29 minimizing soil disturbance and water quality impacts.  
30

- 31 *(6) Facility shall not alter accepted timber management operations on adjacent forest*  
32 *land;*  
33

34 This provision is inapplicable because there is no forest land adjacent to the proposed Station.  
35

- 36 *(7) Facility shall adequately protect fish and wildlife resources by meeting minimum*  
37 *Oregon State Department of Forestry regulations;*  
38

39 This provision is inapplicable because there are no timber, forest or potential forest lands near  
40 the energy facility site.  
41



1           (8) Access roads or easements be improved to the County's Transportation Plan  
2           standards and follow grades recommended by the Public Works Director  
3

4     As explained in the ASC, no temporary access roads will be used for construction of the facility.  
5     The Station is to be accessed from Westland Road via Interstate Highway 82 or 84 and a paved  
6     loop road, connecting to Westland Road, approximately 24 feet wide is proposed for normal  
7     truck and operator vehicle traffic. Further, a spur road, located off of the loop road, is proposed  
8     to allow access to structures and equipment.<sup>104</sup> The access point and all internal access roads  
9     and parking areas are proposed to be paved. As stated in the ASC, the driveway access road  
10    would be improved as required to conform to the requirements of the Umatilla County  
11    Transportation Plan and would follow the recommendations of the Public Works Director. As  
12    discussed in Section IV.B, above, Condition B.6 requires the certificate holder to obtain all  
13    necessary state or local permits or approvals required for construction, operation and  
14    retirement of the facility, and this includes all necessary access permits. In addition, Conditions  
15    M.1, M.2 and M.3, addressed under Section IV.M, below, require the site certificate holder to  
16    work with Umatilla County and the county Public Works Department in improving access roads.  
17

18           (9) Road construction be consistent with the intent and purposes set forth in the Oregon  
19           Forest Practices Act or the 208 Water Quality Program to minimize soil disturbance and  
20           help maintain water quality;  
21

22    There are no forest lands or natural waterways on the energy facility site. Construction  
23    practices to minimize soil disturbances are discussed in consideration of the Council's Soil  
24    Standards section of this proposed order, above.  
25

26           (10) Complies with other conditions deemed necessary.  
27

28    Perennial agrees to comply with all conditions of the site certificate.  
29

30    Based upon the foregoing, the Council finds that the energy facility is a "commercial utility  
31    facility for the purpose of generating power for public use by sale" and is therefore an  
32    allowable use permitted under Section 152.060. The requirements of § 152.061, §§ 152.610  
33    through 152.615, 152.617 and §§ 152.545 through 152.562 are discussed below.  
34

35    **§ 152.061, Standards for all Conditional Uses**  
36

37           *The following limitations shall apply to all conditional uses in an EFU zone. Uses may be*  
38           *approved only where such uses:*  
39

---

<sup>104</sup> ASC, Exhibit B, B-8.

- 1       (A) Will not force a significant change in accepted farm or forest practices on surrounding  
2       lands devoted to farm or forest use; and  
3       (B) Will not significantly increase the cost of accepted farm or forest practices on lands  
4       devoted to farm or forest use.  
5

6       As explained in the ASC, there are no forest practices conducted at the energy facility site or on  
7       surrounding lands; and the surrounding agricultural land utilizes center pivot irrigation, with the  
8       accepted farm practices including soil preparation, sowing, fertilizing, pest and weed  
9       management, and harvesting. The construction and operation of the proposed energy facility  
10      would not change these accepted farm practices or affect the availability or costs of the  
11      necessary inputs as the Station would not physically interfere with the ability to irrigate,  
12      fertilize, or harvest crops on surrounding center-pivot fields. Further, as stated in the ASC, the  
13      the Station operation would not interfere with the obtainment or application of fertilizer,  
14      irrigation water, pesticides or other necessary crop inputs and would not affect the costs of the  
15      inputs. As described in the Exhibit Z of the ASC, the cooling tower drift would not impact the  
16      quality or productivity of soils on surrounding farmlands as the rate of deposition of salts on the  
17      nearest crops is anticipated to be substantially below the threshold at which stress symptoms  
18      are demonstrated.<sup>105</sup> Therefore, no additional inputs would be required. Based upon the  
19      information provided, the Council finds that the energy facility would not force a significant  
20      change in accepted farm practices on surrounding lands devoted to farm use.  
21

22  
23      **§ 152.063, DEVELOPMENT STANDARDS.**  
24

25       *In the EFU zone, the following dimensional and development standards shall apply:*  
26

27       (A) *Minimum parcel frontage. A parcel shall have a minimum street or road frontage of 30*  
28       *feet.*  
29

30       (B) *Front yard setbacks. All buildings shall be set back from front property lines and side or*  
31       *rear property lines adjoining county roads, public roads, state highways, or public or*  
32       *private access easements as follows:*  
33

34           (1) *At least 30 feet from the property line or easement boundary; or*

35           (2) *At least 60 feet from the center line of the road, highway, or easement, whichever is*  
36           *greater.*  
37

38       (C) *Side and rear yard setbacks. Except as provided in division (B) above, the following*  
39       *standards shall apply for side and rear yard setbacks:*  
40

---

<sup>105</sup> ASC, Exhibit K, K-17.

- 1       (1) The minimum yard setback for farm or non-farm dwellings shall be 20 feet.  
2       (2) The minimum yard setback for accessory buildings or structures, for both farm and  
3       non-farm uses, shall be five feet, except as otherwise provided in applicable conditions of  
4       approval, or as constrained by division (D) below.  
5       (3) Special minimum yard setbacks may be established for an approved conditional use  
6       to protect the public health, safety and welfare and to mitigate possible adverse impacts  
7       to adjacent land uses.

8  
9       (D) Distance maintained from aggregate mining operations. A dwelling shall not be located  
10      within 500 feet of an existing aggregate mining operation unless the owner of the property  
11      of the proposed dwelling:

- 12  
13       (1) Obtains a written release from the adjacent mining operation allowing a closer  
14       setback; and  
15       (2) Waives his or her rights to remonstrate against normal aggregate mining activities  
16       allowed by permits issued under this chapter.

17  
18      (E) Stream setback. To permit better light, air, vision, stream pollution control, to protect fish  
19      and wildlife areas, and to preserve the natural scenic amenities and vistas along the  
20      streams, lakes, and wetlands, and to prevent construction in flood prone areas along  
21      streams not mapped as part of the National Flood Insurance Program, the following  
22      setbacks shall apply:

23  
24  
25       (1) All sewage disposal installations such as septic tanks and drainfields shall be set back  
26       from the mean water line or mark along all streams, lakes or wetlands a minimum of  
27       100 feet, measured at right angles to the high water line or mark. In those cases where  
28       practical difficulties preclude the location of the facilities at a distance of 100 feet, and  
29       the DEQ sanitarian finds that a chosen location will not endanger health, the Planning  
30       Director may permit the location of these facilities closer to the stream, lake, or wetland,  
31       but in no case closer than 50 feet.

32  
33       (2) All structures, buildings or similar permanent fixtures shall be set back from the high  
34       water line along all streams, lakes or wetlands a minimum of 100 feet measured at right  
35       angles to the high water line or mark, except that this setback can be reduced to 20 feet  
36       if all of the following criteria are met:

- 37  
38       (a) The parcel contains one acre or less; and  
39       (b) It can be shown with photographs and maps that due to topography the  
40       proposed building will be located outside of a flood-prone area; and

1           (c) Location of the proposed building in compliance with the 100 foot setback would  
2           be inconvenient and inefficient with respect to the location of existing buildings on  
3           the property or due to topographic constraints.  
4

5           (F) Other development standards. All development shall be subject to the regulations  
6           contained in §§ 152.010 through 152.017, §§ 152.545 through 152.562, and to the  
7           exceptions standards of §§ 152.570 through 152.577, including but not limited to: vision  
8           clearance, signs, off street parking, access, fences, wetland drainage, and maintenance,  
9           removal and replacement of riparian vegetation.  
10

11 All buildings and structures in the EFU zone must meet the standards listed in Section 152.063.  
12 The energy facility as well as the three new transmission towers to be built within the EFU zone  
13 qualify as either “buildings” or “structures” under the definition in UCDC Section 152.003.<sup>106</sup>  
14 However, the natural gas pipeline does not qualify as either a building or a structure because it  
15 will be located entirely underground.  
16

17           (A) Minimum parcel frontage. A parcel shall have a minimum street or road frontage of 30  
18           feet.  
19

20 This provision is not applicable because no new parcels would be created as a result of the  
21 facility; however, nonetheless, the energy facility site would have a street frontage of 82 feet  
22 on Westland road, well beyond the 30-foot requirement of subsection (A).<sup>107</sup>  
23

24           (B) Front yard setbacks. All buildings shall be set back from front property lines and side or  
25           rear property lines adjoining county roads, public roads, state highways, or public or  
26           private access easements as follows:  
27

- 28           (1) At least 30 feet from the property line or easement boundary; or  
29           (2) At least 60 feet from the center line of the road, highway, or easement, whichever is  
30           greater.  
31

---

<sup>106</sup> § 152.003. SETBACK. The open yard space on a lot between any building and a lot line  
or a line defining an access easement or road ROW.

§ 152.003. BUILDING. A structure built for the support, shelter or enclosure of person, animals,  
chattels, or property of any kind. For the purposes of this chapter, a canopy is not a building.

§ 152.003. STRUCTURE. Something constructed or built and having a fixed base on, or fixed  
connection to, the ground or another structure. Any constructed or erected object which requires  
location on the ground or is attached to something located on the ground. Structures include but  
are not limited to buildings, decks, fences, signs, towers, cranes, flagpoles, antennas, smokestacks, earth  
formations and overhead transmission lines. Structures do not include paved areas.

<sup>107</sup> ASC, Exhibit K, K-23.

1 (C) Side and rear yard setbacks. Except as provided in division (B) above, the following  
2 standards shall apply for side and rear yard setbacks:  
3

4 (1) The minimum yard setback for farm or non-farm dwellings shall be 20 feet.

5 (2) The minimum yard setback for accessory buildings or structures, for both farm and  
6 non-farm uses, shall be five feet, except as otherwise provided in applicable conditions of  
7 approval, or as constrained by division (D) below.

8 (3) Special minimum yard setbacks may be established for an approved conditional use  
9 to protect the public health, safety and welfare and to mitigate possible adverse impacts  
10 to adjacent land uses.  
11

12 As explained in the ASC, the energy facility and three new transmission towers would comply  
13 with the above listed setbacks. See Figure K-2 for a visual representation of the facility  
14 components. The Council adopts Condition E.2, which requires the certificate holder to design  
15 and construct the facility in compliance with the County design requirements as follows:  
16

17 **Condition E.2** The certificate holder shall design and construct all facility structures and  
18 buildings in compliance with the setback requirements of Umatilla County Development  
19 Ordinance Section 152.063(B), (C), (E) in effect as of April 03, 2014.  
20

21 (D) Distance maintained from aggregate mining operations. A dwelling shall not be located  
22 within 500 feet of an existing aggregate mining operation unless the owner of the property  
23 of the proposed dwelling:  
24

25 (1) Obtains a written release from the adjacent mining operation allowing a closer  
26 setback; and

27 (2) Waives his or her rights to remonstrate against normal aggregate mining activities  
28 allowed by permits issued under this chapter.  
29

30 This provision is not applicable because no dwellings are proposed as part of the facility.  
31

32 (E) Stream setback. To permit better light, air, vision, stream pollution control, to protect fish  
33 and wildlife areas, and to preserve the natural scenic amenities and vistas along the  
34 streams, lakes, and wetlands, and to prevent construction in flood prone areas along  
35 streams not mapped as part of the National Flood Insurance Program, the following  
36 setbacks shall apply:  
37

38 (1) All sewage disposal installations such as septic tanks and drainfields shall be set back  
39 from the mean water line or mark along all streams, lakes or wetlands a minimum of  
40 100 feet, measured at right angles to the high water line or mark. In those cases where  
41 practical difficulties preclude the location of the facilities at a distance of 100 feet, and  
42 the DEQ sanitarian finds that a chosen location will not endanger health, the Planning

1        *Director may permit the location of these facilities closer to the stream, lake, or wetland,*  
2        *but in no case closer than 50 feet.*

3  
4        *(2) All structures, buildings or similar permanent fixtures shall be set back from the high*  
5        *water line along all streams, lakes or wetlands a minimum of 100 feet measured at right*  
6        *angles to the high water line or mark, except that this setback can be reduced to 20 feet*  
7        *if all of the following criteria are met:*

8  
9            *(a) The parcel contains one acre or less; and*

10          *(b) It can be shown with photographs and maps that due to topography the*  
11          *proposed building will be located outside of a flood-prone area; and*

12          *(c) Location of the proposed building in compliance with the 100 foot setback would*  
13          *be inconvenient and inefficient with respect to the location of existing buildings on*  
14          *the property or due to topographic constraints.*

15  
16        As explained in Exhibit V, the applicant proposes a new septic system and leach field, which  
17        would be constructed more than 100 feet from any waterways. The high water line of the  
18        closest waterway is over one-quarter mile from the energy facility site, which necessarily is in  
19        compliance with the above setback requirement.<sup>108</sup> Further, in accordance with subsection (2),  
20        all structures, buildings and/or similar permanent fixtures associated with the energy facility  
21        would comply with the 100-foot setback requirement, including the transmission towers.<sup>109</sup> The  
22        Council adopts Condition E.2, above, requiring the certificate holder to construct the facility in  
23        compliance with the County design requirement as described in this ordinance.

24  
25          *(F) Other development standards. All development shall be subject to the regulations*  
26          *contained in §§ 152.010 through 152.017, §§ 152.545 through 152.562, and to the*  
27          *exceptions standards of §§ 152.570 through 152.577, including but not limited to: vision*  
28          *clearance, signs, off street parking, access, fences, wetland drainage, and maintenance,*  
29          *removal and replacement of riparian vegetation.*

30  
31        The above listed development standards are discussed below.

## 32 33        **B. Light Industrial**

34  
35        Portions of the reconductored transmission line and up to three new transmission poles will  
36        cross about 1600 feet of land zoned light industrial. Transmission facilities are allowed in light  
37        industrial zoned lands as conditional uses.

## 38 39        **§152.301, Purpose**

40  

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<sup>108</sup> ASC, Exhibit K, K-25.

<sup>109</sup> ASC, Exhibit K, K-26.

1     *The LI Light Industrial Zone is designed to provide areas for industrial use that are less*  
2     *intensive than heavy industrial uses, and are less offensive to adjacent land uses, and are*  
3     *compatible with certain commercial uses. It is designed to help the county expand and*  
4     *diversify its economic base. The LI Zone is appropriate for areas near major transportation*  
5     *facilities which are generally suited for industry and include highways, railroads, and*  
6     *waterways.*

7  
8     As explained in the ASC, the portion of the proposed transmission line within the LI-zoned lands  
9     runs along Westland Road, near I-82 and existing railroad tracks. Also located near the LI-zoned  
10    lands are the HGP and the proposed Lamb Weston industrial food processing plant. The  
11    proposed transmission line is consistent with existing land use patterns as there are existing  
12    transmission lines in the area.<sup>110</sup>

13  
14    **§ 152.303, CONDITIONAL USES PERMITTED; GENERAL CRITERIA.**

15  
16     *(A) In a LI Zone, the following uses and their accessory uses are permitted, conditionally,*  
17     *subject to the requirements of §§ 152.610 through 152.616, and upon the issuance of a*  
18     *zoning permit:*

19     \*\*\*

20  
21     *(16) Utility facility as provided in § 152.616 (CCC);*

22  
23    UCDC § 152.003 defines “utility facility” as follows:

24  
25     *Any major **UTILITY FACILITY** structure owned or operated by a public, private or cooperative*  
26     *electric, fuel, communication, sewage or water company for the generation, transmission,*  
27     *distribution or processing of its productions or for the disposal of cooling water, waste or by-*  
28     *products, and including power transmission lines, major trunk pipelines, power substations,*  
29     *dams, water towers, sewage lagoon, sanitary landfills and similar facilities, but excluding*  
30     *sewer, water, gas, telephone and power local distribution lines and similar minor facilities*  
31     *allowed in any zone.*

32  
33    Based upon the above definition which specifically includes power transmission lines, the  
34    transmission line is a “utility facility” and thus allowed in LI-zoned lands a conditional use.  
35    Section 152.616 is discussed below.

36  
37     *(B) The following general criteria shall be used to review all conditional uses listed in the LI*  
38     *Zone, notwithstanding any other criteria listed in this chapter for a particular use:*

39  
40     *(1) The use will be compatible with other uses allowed in a LI Zone;*

---

<sup>110</sup> ASC, Exhibit K, K-27.

1           (2) *The use will be in conformance with policies listed in the text of the Comprehensive*  
2           *Plan;*

3           (3) *The use would not have an adverse impact on existing industrial uses in that it would*  
4           *not be incompatible with the noise, dust, vibrations and odors that may emanate from*  
5           *or be caused by the existing adjacent industrial uses.*

6  
7   The transmission line would be compatible with the other uses allowed in the LI zone, which  
8   include food products manufacturing, trucking terminals, equipment storage yards, welding,  
9   etc. Moreover, there are already transmission lines in the LI-zoned area as the applicant is  
10   proposing to utilize that existing infrastructure and upgrade the line from a 115kV to a 230kV.  
11   While up to three new transmission poles are proposed to cross light industrial zoned lands, no  
12   future use of the currently unoccupied lands would be precluded as a result of the construction  
13   of the three transmission towers. Further, the operation of the proposed transmission line  
14   would not be affected by operation of the existing adjacent industrial uses as the line would not  
15   be incompatible with noise, dust, vibrations or odors which are potentially emitted from those  
16   facilities.

17  
18   Additionally, as discussed further below, the use conforms with the policies of the Umatilla  
19   County Comprehensive Plan.

20  
21  
22   **§ 152.616, STANDARDS FOR REVIEW OF CONDITIONAL USES AND LAND USE**  
23   **DECISIONS.**

24  
25           *The following standards shall apply for review by the Planning Director or designated*  
26           *planning authority of the specific conditional uses and land use decisions listed below:*

27  
28           (CCC) *Utility facility.*

29  
30           (1) *The facility is designed to minimize conflicts with scenic values and adjacent*  
31           *recreational residential, forest, grazing and farm uses as outlined in policies of the*  
32           *Comprehensive Plan;*

33  
34   As explained in the ASC, there are no potential conflicts with recreational residential, forest, or  
35   grazing uses because there are no recreational residential, grazing, or forest uses adjacent to  
36   the portion of the transmission line located within LI-zoned lands. Further, as discussed in  
37   greater detail in the Scenic Resources section of this final order, the facility is designed to  
38   minimize conflicts with scenic values and adjacent farm uses as the reconducted portions of  
39   the transmission line would not be any visibly different from the existing line and the three new  
40   proposed transmission poles would be of similar height and appearance to the existing  
41   transmission towers in the area, as required by Condition J.3. Therefore, the Council finds that  
42   the facility is designed to minimize conflicts with scenic values.



1  
2           *(2) The facility be of a size and design to help reduce noise or other detrimental effects*  
3           *when located adjacent to recreational residential dwellings;*

4  
5 This provision is not applicable because there are no recreational residential dwellings adjacent  
6 to the portion of the transmission line within the LI-zoned lands.

7  
8           *(3) The facility may be required to be fenced, landscaped or screened;*

9  
10 As explained in the ASC, fencing, or screening would be impracticable because of the linear  
11 nature of the transmission line. The two new transmission towers west of Westland Road  
12 would be located within the existing right of way and constructed in a manner consistent with  
13 the existing infrastructure. Further, the single tower to be located east of Westland road would  
14 be located between the HGP and the railroad line; therefore, it would be impractical to provide  
15 fencing, screening or landscaping. Consequently, Council finds that the proposed transmission  
16 line does not require fencing, landscaping or screening beyond that required pursuant to  
17 conditions A.9 and D.3.

18  
19           *(4) The facility does not materially alter the stability of the overall land use pattern of the*  
20 *area;*

21  
22 The transmission line would not materially alter the overall land use pattern of the area  
23 because Perennial proposed utilizing and reconductoring an existing transmission line in the  
24 area, with the addition of up to three new poles. The area currently includes industrial facilities,  
25 utility power generation facilities and transmission corridors. Therefore, the Council finds that  
26 the transmission line will not materially alter the stability of the overall land use pattern of the  
27 area.

28  
29           *(5) The facility does not constitute an unnecessary fire hazard, and consideration be*  
30 *made for minimum fire safety measures which can include, but are not limited to:*

31  
32           *(a) The site be maintained free of litter and debris;*

33           *(b) Using non-combustible or fire retardant treated materials for structures and*  
34 *fencing;*

35           *(c) Clearing site of all combustible materials within 30 feet of structures;*

36  
37 As explained in the ASC, there have been no reported fire hazards associated with the existing  
38 transmission infrastructure. Further, the applicant proposes to maintain the transmission line  
39 right of way free of litter, debris and combustible materials. In addition, Condition M.7 requires  
40 the certificate holder to develop and implement a fire protection system, which must include a  
41 fire water system, portable fire extinguishers and smoke detection system. Therefore, the  
42 Council finds that the facility does not constitute an unnecessary fire hazard.

1  
2       (6) Major transmission tower, poles and similar gear shall consider locations within or  
3       adjacent to existing rights of way in order to take the least amount of timberland out of  
4       production and maintain the overall stability and land use patterns of the area, and  
5       construction methods consider minimum soil disturbance to maintain water quality;  
6

7       No timberland is located along the existing transmission line ROW nor would any be affected by  
8       the transmission line. The reconducted portions of the line within the LI-zoned lands would  
9       utilize the existing infrastructure within the existing ROW<sup>111</sup> and the three proposed new  
10       transmission poles would be built to minimize soil disturbance as discussed below in relation to  
11       the Council's Soil Protection Standard. The Council finds that the transmission poles would  
12       maintain the overall stability and land use patterns of the area.  
13

14       (7) The facility shall adequately protect fish and wildlife resources by meeting minimum  
15       Oregon State Department of Forestry regulations;  
16

17       This provision is inapplicable because there are no timber, forest or potential forest lands near  
18       the portion of the transmission line located on LI-zoned lands.  
19

20       (8) Access roads or easements be improved to a standard and follow grades  
21       recommended by the Public Works Director;  
22

23       No improvement to permanent access roads is required because, as explained in the ASC,  
24       existing access roads provide sufficient access to permit necessary construction activities  
25       associated with reconductoring of the transmission line and the potentially three new poles in  
26       the LI-zoned lands.<sup>112</sup>  
27

28       (9) Road construction be consistent with the intent and purposes set forth in the Oregon  
29       Forest Practices Act or the 208 Water Quality Program to minimize soil disturbance and  
30       help maintain water quality;  
31

32       As provided in the ASC, there are no forest lands or natural waterways on the portion of the  
33       transmission corridor located on LI-zoned lands. Construction operations would be conducted  
34       in compliance with a NPDES1200-C permit and associated Erosion and Sediment Control Plan to  
35       minimize soil disturbance and maintain water quality. Condition D.1 requires the site certificate  
36       holder to conduct all construction activities in compliance with its 1200-C permit.  
37

38       (10) Land or construction clearing shall be kept to a minimum to minimize soil  
39       disturbances  
40       and help maintain water quality;

---

<sup>111</sup> ASC, Exhibit K, K-29.

<sup>112</sup> ASC, Exhibit K, K-30.

Up to three new transmission towers are proposed to be located in the LI-zone. As provided in the ASC, construction activities would be in compliance with a NPDES 1200-C permit and the related Erosion and Sediment Control Plan. See Condition D.1, which requires construction in compliance with the 1200-C permit. For the reconductoring, approximately 1.38 acres over an estimated 12 restringing sites would be temporarily disturbed. Therefore, the Council finds that the clearing required for the proposed transmission line will be kept to a minimum.

*(11) Complies with other conditions as deemed necessary provided in § 152.615.*

Compliance with the requirements of UCDC § 152.615 is discussed below.

Based on the foregoing, the Council finds that the transmission line complies with the standards of Section 152.616(CCC).

**§ 152.304 LIMITATIONS ON USE.**

*(A) All business, commercial and industrial activities, and storage allowed in an LI, Light Industrial, Zone shall be conducted wholly within a building or shall be screened from view from adjacent public roads or surrounding properties in farm, residential or commercial zones, unless the entire activity is conducted more than 500 feet from said surrounding property or road. Outdoor storage of farm and forest products or equipment shall not be subject to this limitation;*

*(B) All off-street loading areas shall be screened from view if adjoining properties are in a residential zone;*

*(C) All noise, vibration, dust, odor, smoke, appearance or other objectionable factors involved in any activity shall comply with appropriate state and federal regulations*

Subsection (A) above is not applicable to the transmission line because no business, commercial or industrial activities would occur within the LI-zoned areas as a result of the construction and operation of the line. Subsection (B) is also inapplicable because the transmission line would not include any off-street loading areas and there are no residential-zoned properties adjacent to the LI-zoned areas of the proposed transmission line. To comply with (C), as explained in the ASC, and subject to the conditions contained in this final order, the transmission line will comply with all applicable state and federal regulations related to noise, vibration, dust, odor, smoke or appearance. Based upon the above, the Council finds that the line complies with Section 152.304.

**§ 152.305 DESIGN REVIEW.**

1 (A) An application for a zoning permit for a use permitted in § 152.302 of this chapter shall  
2 be accompanied by a site plan.

3  
4 (B) The Planning Director or his authorized agent shall review the site plan for completeness  
5 and compliance with the following requirements:

6  
7 (1) The site plan shall consist of the following:

8  
9 (a) An accurate map showing property lines, dimensions, and location of buildings on  
10 the property, both existing and proposed;

11 (b) Drawn at a scale no smaller than 1" = 100';

12 (c) Access points to county or state roads;

13 (d) Names of the owner and developer of the site.

14  
15 (2) The Planning Director or his authorized agent may require landscaping around the  
16 building(s) or the property lines to insure conformance with county policies;

17  
18 (3) Applicable standards listed in this chapter for access, parking lots and spaces, off-  
19 street parking and loading requirements, setbacks, signs, vision clearance, and other  
20 standards which may now or hereafter be enacted.

21  
22 Prior to construction, the applicant proposes to submit an application for a zoning permit for  
23 the portion of the transmission line located within the LI-zoned area and that it would include a  
24 site plan. However, as provided in the county's comments, the certificate holder must obtain a  
25 zoning permit for each tax lot where the facility is proposed. Therefore, the Council adopts  
26 Condition B.6, which requires the certificate holder to obtain all necessary local permits or  
27 approvals required for construction, operation and retirement of the facility.

28  
29 No county policies require landscaping around the transmission line in the areas zoned LI.  
30 Therefore, the Council does not require any landscaping beyond that necessary pursuant to  
31 Conditions A.8 and D.3. Compliance with subsection (3) is discussed in reference to the  
32 "General Provisions" section below.

33  
34 **§ 152.306 DIMENSIONAL STANDARDS.**

35  
36 *In an LI zone, the following dimensional standards shall apply:*

37  
38 (A) Lot size. The minimum lot size shall be one acre unless written proof the Department of  
39 Environmental Quality is provided which shows that an approvable subsurface disposal  
40 system can be located on less than one acre;

41 (B) Minimum lot width. The minimum average lot width shall be 100 feet with a minimum of  
42 25 feet fronting on a dedicated county or public road or state highway;

1 (C) Setback requirements. The minimum setback requirements shall be as follows:

2  
3 (1) Front yard: 20 feet, except if the front yard area is used for off-street parking space,  
4 then the front yard shall be a minimum of 40 feet;

5 (2) Side yard: 20 feet;

6 (3) Rear yard: 20 feet;

7 (4) The minimum side and rear yard setbacks may be modified upon the request of a  
8 property owner, pursuant to § 152.625 through 152.630. Under no circumstance shall  
9 the setback requirements be modified when the reduced setback would adjoin  
10 residentially zoned property.

11  
12 (D) Stream setback. To permit better light, air, vision, stream or pollution control, protect  
13 fish and wildlife areas, and to preserve the natural scenic amenities and vistas along the  
14 streams, lakes and wetlands, the following setbacks shall apply:

15  
16 (1) All sewage disposal installations, such as septic tanks and septic drainfields, shall be  
17 setback from the mean high-water line or mark along all streams, lakes or wetlands a  
18 minimum of 100 feet, measured at right angles to the high-water line or mark. In those  
19 cases where practical difficulties preclude the location of the facilities at a distance of  
20 100 feet and the DEQ finds that a closer location will not endanger health, the Planning  
21 Director may permit the location of these facilities closer to the stream, lake or wetland,  
22 but in no case closer than 50 feet.

23 (2) All structures, buildings or similar permanent fixtures shall be set back from the  
24 highwater line along all streams, lakes or wetlands a minimum of 100 feet measured at  
25 right angles to the high-water line or mark.

26  
27 Subsections (A), (B) and (D)(1), above, are not applicable to the proposed facility because no  
28 new lots would be created within the LI-zone and no sewage disposal facilities are to be located  
29 in the LI-zoned area. In accordance with subsection (C), the applicant states that the three new  
30 transmission towers would be constructed within the existing ROW and would comply with all  
31 applicable setback requirements. Regarding subsection (D)(2), the proposed three new  
32 transmission towers would be set back more than 100 feet from the high water line or mark of  
33 all streams, lakes or wetlands as the closest natural waterway over one-half mile from any  
34 transmission tower within the LI zone. Based upon the above, the Council finds that the line  
35 complies with UCDC Section 152.306.

### 36 37 **C. Rural Tourist Commercial**

#### 38 39 **§ 152.281 PURPOSE.**

40  
41 *The RTC Rural Tourist Commercial Zone is designed to serve the traveling public along major*  
42 *traffic corridors or at appropriate recreational locations outside unincorporated*

1 communities and urban growth boundaries. Facilities may include service stations, eating  
2 establishments or over-night accommodations. The RTC Zone is appropriate along major  
3 interstate interchanges as discussed in the Comprehensive Plan. This zone is applied to  
4 commercial lands outside unincorporated communities and urban growth boundaries for  
5 which an exception to Goal 14 has not been approved.

6  
7 The intent of the Rural Tourist Commercial Zone is to permit the continuation and expansion  
8 of existing uses and to provide rural scale tourism-related employment uses.  
9

10 The transmission line ROW and transmission towers cross a small portion of land zoned as Rural  
11 Tourist Commercial (RTC) at the southwest corner of Westland Road and Lamb Road. As  
12 provided in the ASC, the reconducted transmission line would utilize existing transmission  
13 towers on the RTC-zoned land.  
14

15 As explained in the ASC, while the RTC zone is located near the Lamb Road I-82 interchange, no  
16 developed tourist facilities are located in the area. Further, there would not be a lasting impact  
17 on future development because the proposed transmission line would be located within the  
18 existing transmission line corridor and utilize the existing transmission towers within the RTC  
19 zone. No new transmission towers are proposed within the RTC zone.  
20

21 **§152.283 CONDITIONAL USES PERMITTED.**  
22

23 In an RTC Zone, the following uses and their accessory uses are permitted subject to the  
24 requirements of §§152.610 through 152.616 and 152.284 through 152.286 of this chapter,  
25 and upon the issuance of a zoning permit:  
26 \*\*\*  
27

28 (A) Utility facility as provided in § 152.616 (CCC);  
29

30 As discussed in the ASC, the existing transmission line is a utility facility and under UCDC Section  
31 152.283 (C), a utility facility is a conditional use permitted in the RTC-zone. However, per  
32 Umatilla County Board of County Commissioner's comment on the complete application, "no  
33 land use permit is required to co-locate and upgrade the transmission line." Nonetheless, the  
34 reconducted portions of the transmission line within the RTC-zone satisfy all conditional use  
35 requirements as discussed below.  
36

37 **§ 152.616, STANDARDS FOR REVIEW OF CONDITIONAL USES AND LAND USE**  
38 **DECISIONS.**  
39

40 The following standards shall apply for review by the Planning Director or designated  
41 planning authority of the specific conditional uses and land use decisions listed below:  
42

1 (CCC) Utility facility.

2  
3 (1) The facility is designed to minimize conflicts with scenic values and adjacent  
4 recreational residential, forest, grazing and farm uses as outlined in policies of the  
5 Comprehensive Plan;  
6

7 As explained in the ASC, there are no potential conflicts with recreational residential, forest, or  
8 grazing uses because there are no recreational residential, grazing, or forest uses adjacent to  
9 the portion of the proposed transmission line located within RTC-zoned lands. Further, the  
10 facility is designed to minimize conflicts with scenic values and adjacent farm uses as the  
11 reconducted portions of the transmission line would not be any visibly different from the  
12 existing line and would utilize existing structures.

13  
14 (2) The facility be of a size and design to help reduce noise or other detrimental effects  
15 when located adjacent to recreational residential dwellings;  
16

17 This provision is not applicable because there are no recreational residential dwellings adjacent  
18 to the portion of the transmission line within the RTC-zoned lands.

19  
20 (3) The facility may be required to be fenced, landscaped or screened;  
21

22 As explained in the ASC, fencing, landscaping, or screening would be impracticable because of  
23 the linear nature of the transmission line. Further, the reconducted portion of the  
24 transmission line within the RTC-zoned area is located in an area already utilized for a  
25 transmission corridor. Therefore, the Council finds that the transmission line does not require  
26 fencing, landscaping or screening beyond that required pursuant to Conditions A.8 and D.3.  
27

28 (4) The facility does not materially alter the stability of the overall land use pattern of the  
29 area;  
30

31 The proposed transmission line would not materially alter the overall land use pattern of the  
32 area because the applicant is proposing to reconductor an existing transmission line within the  
33 RTC-zoned area, so no new transmission towers would be required. Therefore, the Council finds  
34 that the transmission line does not materially alter the stability of the overall land use pattern  
35 of the area.

36  
37 (5) The facility does not constitute an unnecessary fire hazard, and consideration be  
38 made for minimum fire safety measures which can include, but are not limited to:  
39

40 (a) The site be maintained free of litter and debris;

41 (b) Using non-combustible or fire retardant treated materials for structures and  
42 fencing;

1                   (c) *Clearing site of all combustible materials within 30 feet of structures;*  
2

3     As explained in the ASC, there have been no reported fire hazards associated with the existing  
4     transmission infrastructure and the existing power poles that would be used for the  
5     reconducted line are currently constructed of non-combustible or fire retardant treated  
6     material.<sup>113</sup> In addition, Condition M.6 requires the certificate holder to develop and implement  
7     a fire protection system, which must include a fire water system, portable fire extinguishers and  
8     smoke detection system. Therefore, the Council finds that the line does not constitute an  
9     unnecessary fire hazard.

10  
11                   (6) *Major transmission tower, poles and similar gear shall consider locations within or*  
12                   *adjacent to existing rights of way in order to take the least amount of timberland out of*  
13                   *production and maintain the overall stability and land use patterns of the area, and*  
14                   *construction methods consider minimum soil disturbance to maintain water quality;*  
15

16     As explained the ASC, in the RTC zone, the transmission line would be located within the  
17     existing transmission line ROW and would utilize existing transmission towers, which eliminates  
18     the potential for soil disturbance and protects water quality. Therefore, the Council finds that  
19     the transmission line would maintain the overall stability and land use patterns of the area.  
20

21                   (7) *The facility shall adequately protect fish and wildlife resources by meeting minimum*  
22                   *Oregon State Department of Forestry regulations;*  
23

24     This provision is inapplicable because there are no timber, forest or potential forest lands near  
25     the portion of the transmission line located on RTC-zoned lands.  
26

27                   (8) *Access roads or easements be improved to a standard and follow grades*  
28                   *recommended by the Public Works Director;*  
29

30     No improvement to permanent access roads is required because, as explained in the ASC,  
31     existing access roads provide sufficient access to the transmission line corridor.  
32

33                   (9) *Road construction be consistent with the intent and purposes set forth in the Oregon*  
34                   *Forest Practices Act or the 208 Water Quality Program to minimize soil disturbance and*  
35                   *help maintain water quality;*  
36

37     As provided in the ASC, there are no forest lands or natural waterways on the portion of the  
38     transmission corridor located on RTC-zoned lands and no road construction would take place  
39     within the RTC-zone.  
40

---

<sup>113</sup> ASC, Exhibit K, K-38.



1           (10) Land or construction clearing shall be kept to a minimum to minimize soil  
2           disturbances and help maintain water quality;

3  
4       No new transmission towers would be constructed within the RTC zone. Therefore, no ground-  
5       breaking activities would occur within the RTC-zone.

6  
7           (11) Complies with other conditions as deemed necessary provided in § 152.615.

8  
9       Compliance with the requirements of UCDC § 152.615 is discussed below.

10  
11       Based on the foregoing, the Council finds that the transmission line complies with the standards  
12       of Section 152.616(CCC).

13  
14       **§ 152.284 LIMITATIONS ON USES.**

15  
16           *In the RTC Zone, the following limitations on uses shall apply:*

17  
18           (A) *Outside storage areas shall be screened with a site-obscuring fence so that the area shall*  
19           *not be exposed to view from the traveling public and surrounding properties;*

20  
21           (B) *Storage of scrap or salvage materials shall be prohibited.*

22  
23           (C) *Except as provided in Paragraphs D and E of this Section, buildings shall not exceed*  
24           *3,500 square feet of floor space*

25  
26           (D) *Motels and hotels that existed on July 1, 2005 may expand up to 35 units or up to 50% of*  
27           *the number of existing units, whichever is larger, with no limitation on square footage.*

28  
29           (E) *Structures that existed on July 1, 2005 may expand to a building size of 4,500 square feet*  
30           *or to a size that is 50% larger than the building size that existed on July 1, 2005, whichever is*  
31           *larger.*

32  
33           (F) *Notwithstanding the size limitations for structures contained in this chapter, a lawfully*  
34           *approved or lawfully constructed structure existing as of July 1, 2005 shall not be considered*  
35           *a non-conforming use, and in the event the structure is destroyed or substantially damaged,*  
36           *the structure may be restored to its prior lawfully approved size.*

37  
38       As explained in the ASC, there would be no storage, including storage of scrap or salvage  
39       materials, within the portion of the transmission line located in the RTC-zoned lands.  
40       Subsections (C)—(F) are not applicable because there would be no buildings constructed within  
41       the portion of the transmission line located within the RTC-zoned lands. Based on the

foregoing, the Council finds that the transmission line complies with use limitations of UCDC Section 152.284.

**§ 152.285 DESIGN REVIEW.**

*(A) An application for a zoning permit for a use permitted in § 152.302 of this chapter shall be accompanied by a site plan.*

*(B) The Planning Director or his authorized agent shall review the site plan for completeness and compliance with the following requirements:*

*(1) The site plan shall consist of the following:*

- (a) An accurate map showing property lines, dimensions, and location of buildings on the property, both existing and proposed;*
- (b) Drawn at a scale no smaller than 1" = 100';*
- (c) Access points to county or state roads;*
- (d) Names of the owner and developer of the site.*

*(2) The Planning Director or his authorized agent may require landscaping around the building(s) or the property lines to insure conformance with county policies;*

*(3) Applicable standards listed in this chapter for access, parking lots and spaces, off-street parking and loading requirements, setbacks, signs, vision clearance, and other standards which may now or hereafter be enacted.*

As stated above, consistent with the SAG recommendation, no zoning permit would be required for the portion of the transmission line within the RTC zone because it is co-located. Therefore, this requirement is not applicable. Nonetheless, Condition B.6 requires the certificate holder to obtain all necessary state or local permits or approvals required for construction, operation and retirement of the facility.

**§ 152.286 DIMENSIONAL STANDARDS**

*In an RTC zone, the following dimensional standards shall apply*

*(A) Lot size. The minimum lot size shall be one acre unless written proof the Department of Environmental Quality is provided which shows that an approvable subsurface disposal system can be located on less than one acre;*

*(B) Minimum lot width. The minimum average lot width shall be 100 feet with a minimum of 25 feet fronting on a dedicated county or public road or state highway;*

1  
2 (C) Setback requirements. No building shall be located closer than 20 feet from a property  
3 line, except on the street/road side of a corner lot used for a side yard the setback shall be  
4 55 feet from the center line of the road, highway, or easement, or 25 feet from the property  
5 line, whichever is greater. The minimum side and rear yard setbacks may be modified upon  
6 the request of a property owner, pursuant to § 152.625 through 152.630. Under no  
7 circumstance shall the setback requirements be modified when the reduced setback would  
8 adjoin residentially zoned property.

9  
10 (D) Stream setback. To permit better light, air, vision, stream or pollution control, protect  
11 fish and wildlife areas, and to preserve the natural scenic amenities and vistas along the  
12 streams, lakes and wetlands, the following setbacks shall apply:

13  
14 (1) All sewage disposal installations, such as septic tanks and septic drainfields, shall be  
15 setback from the mean high-water line or mark along all streams, lakes or wetlands a  
16 minimum of 100 feet, measured at right angles to the high-water line or mark. In those  
17 cases where practical difficulties preclude the location of the facilities at a distance of  
18 100 feet and the DEQ finds that a closer location will not endanger health, the Planning  
19 Director may permit the location of these facilities closer to the stream, lake or wetland,  
20 but in no case closer than 50 feet.

21  
22 (2) All structures, buildings or similar permanent fixtures shall be set back from the  
23 highwater line along all streams, lakes or wetlands a minimum of 100 feet measured at  
24 right angles to the high-water line or mark.

25  
26 Subsections (A) and (B) are not applicable because no new lots would be created as part of the  
27 reconducted transmission line in the RTC zone. Subsection (C) is not applicable because no  
28 new transmission towers or other buildings would be constructed within the RTC-zoned lands.  
29 Lastly, regarding subsection (D), no sewage disposal facilities or transmission towers, buildings  
30 or structures, would be constructed within the RTC-zoned lands and the existing towers in the  
31 zone are already located more than 100 feet from any streams, lakes or wetlands. Therefore,  
32 the Council finds that the line complies with the dimensional standards contained at UCDC  
33 Section 152.286.

34  
35 **D. Conditional Use Permit Restrictions for Exclusive Farm Use, Light Industrial and Rural**  
36 **Tourist Commercial Zoned Areas**

37  
38 **§ 152.615, Conditional Use Permit Restrictions**

39  
40 *In addition to the requirements and criteria listed in this subchapter, the Hearings Officer,*  
41 *Planning Director or the appropriate planning authority may impose the following*  
42 *conditions upon a finding that circumstances warrant such additional restrictions:*

- 1  
2 (A) Limiting the manner in which the use is conducted, including restricting hours of  
3 operation and restraints to minimize such environmental effects as noise, vibration, air  
4 pollution, water pollution, glare or odor;  
5  
6 (B) Establishing a special yard, other open space or lot area or dimension;  
7  
8 (C) Limiting the height, size or location of a building or other structure;  
9  
10 (D) Designating the size, number, location and nature of vehicle access points;  
11  
12 (E) Increasing the required street dedication, roadway width or improvements within the  
13 street right of way;  
14  
15 (F) Designating the size, location, screening, drainage, surfacing or other improvement of a  
16 parking or loading area;  
17  
18 (G) Limiting or otherwise designating the number, size, location, height and lighting of signs;  
19  
20 (H) Limiting the location and intensity of outdoor lighting and requiring its shielding;  
21  
22 (I) Requiring diking, screening, landscaping or other methods to protect adjacent or nearby  
23 property and designating standards for installation and maintenance.  
24  
25 (J) Designating the size, height, location and materials for a fence;  
26  
27 (K) Protecting and preserving existing trees, vegetation, water resources, wildlife habitat, or  
28 other significant natural resources;  
29  
30 (L) Parking area requirements as listed in §§ 152.560 through 152.562 of this chapter.  
31

32 EFU, LI and RTC- zoned areas require compliance with other conditions as deemed necessary  
33 and provided in UCDC Section 152.615, which states that conditions may be imposed “upon a  
34 finding that circumstances warrant such additional restrictions.” Section 152.615 includes a list  
35 of discretionary conditions and does not contain substantive standards. The county  
36 recommended minimal facility conditions in its report on the complete application, and those  
37 recommendations have been incorporated into conditions throughout this final order, as  
38 applicable.  
39

#### 40 **E. Zoning Permit**

#### 42 **§ 152.612 PROCEDURE FOR TAKING ACTION ON A CONDITIONAL USE OR LAND**

1 **USE DECISION APPLICATION.**

2  
3 *(D) An applicant granted a conditional use permit or land use decision must obtain a County*  
4 *zoning permit for each tax lot before commencing construction.*  
5

6 UCDC Section 152.612(C) provides that a conditional use permit “will not be approved unless  
7 the proposed use of the land will be in conformance with the County Comprehensive Plan.”  
8 Applicable policies of the UCCP are discussed below. UCDC Section 152.612(D) provides that an  
9 applicant granted a conditional use permit must obtain a County Zoning Permit before  
10 commencing construction. If the Council approves a site certificate for the proposed facility,  
11 then the County must issue a conditional use permit for the energy facility site in accordance  
12 with ORS 469.401(3), and this ordinance would require that the certificate holder obtain a  
13 zoning permit for each tax lot where new construction would occur. The County has defined  
14 “zoning permit” in UCDC Section 152.003 as follows:  
15

16 **ZONING PERMIT.** *An official finding that a planned use of a property, as indicted by an*  
17 *application, complies with the requirements of this chapter or meets the special conditions*  
18 *of a variance or conditional use permit (see also DEVELOPMENT PERMIT)*  
19

20 For the reasons described throughout this section, the Council finds that the facility complies  
21 with the requirements of the applicable County ordinances contained in the UCDC, Chapter  
22 152.  
23

24 **F. General Provisions**

25  
26 **§ 152.010 ACCESS TO BUILDINGS; PRIVATE DRIVEWAYS AND EASEMENTS.**  
27

28 *(A) Every building hereafter erected or moved shall be on a lot that abuts a public street or a*  
29 *recorded easement. All structures shall be so located on lots as to provide safe and*  
30 *convenient access for servicing, fire protection, and required off-street parking. In*  
31 *commercial and industrial zones, access points shall be minimized. To accomplish this,*  
32 *access shall be limited to one every 200 feet and shall be reviewed during the design review*  
33 *stage or the conditional use hearing. If necessary to accomplish this, driveways may be*  
34 *shared between two lots.*  
35

36 *(B) Private driveways and easements that enter onto a public or county road or state or*  
37 *Federal highway shall be constructed of at least similar if not the same material as the*  
38 *public or county road or state or federal highway to protect the edge of the road from rapid*  
39 *deterioration. The improvements shall extend at least 25 feet back from the edge of the*  
40 *existing travel lane surface.*  
41

1 UCDC Section 152.010 addresses access to buildings and structures and private driveways and  
2 easements that enter onto a public or county road or state or federal highway.

3  
4 The western edge of the energy facility site abuts Westland Road, a public road. To the north of  
5 the energy facility site's access point on Westland Road, the closest access point is the  
6 Hermiston Generating Plant driveway, located over 600 feet away. To the south of the energy  
7 facility site's access point on Westland Road, the closest access point is Westport Lane, again  
8 located over 600 feet away. All new proposed transmission towers would be constructed on tax  
9 lots that abut public streets and, as stated in the ASC, would be constructed so as to be safely  
10 and conveniently accessible for maintenance, servicing and fire protection. As discussed  
11 previously, the natural gas pipeline is not a "structure" or a "building", and therefore  
12 subsection (A) is not applicable to the gas line.

13  
14 Regarding Subsection (B), the driveway access to Westland Road would be fully paved and  
15 therefore constructed of at least similar if not the same material as Westland Road. Subsection  
16 (B) is not applicable to the natural gas pipeline or the transmission line because no new private  
17 driveways or easements would be constructed to access any roadways from the natural gas  
18 pipeline or transmission line.<sup>114</sup>

19  
20 Based on the foregoing, the Council finds that the energy facility and transmission line would  
21 comply with the requirements of UCDC Section 152.010.

22  
23 **§ 152.011 VISION CLEARANCE.**

24  
25 *Vision clearance areas shall be provided with the following distance establishing the size of*  
26 *the vision clearance area:*

27  
28 *(A) In an Agricultural or Residential Zone, the minimum distance shall be 30 feet or, at*  
29 *intersections including an alley, 10 feet;*

30  
31 *(B) In all other zones the minimum distance shall be 15 feet or, at intersections including an*  
32 *alley, 10 feet, except when the angle of intersection between streets is less than 30 degrees,*  
33 *the distance shall be 25 feet;*

34  
35 *(C) The vision clearance area shall not contain any planting, wall, structure, or obstruction of*  
36 *any kind exceeding two and one-half feet in height measured from the grade of the street*  
37 *centerline.*

38  
39 At the access point to the energy facility site, Westland Road is flat and straight with clear  
40 visibility. As stated in the ASC, the vision clearance would be maintained free of any visual

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<sup>114</sup> ASC, Exhibit K, K-45.

1 obstructions and the existing railroad crossing barrier is more than 30 feet from the access  
2 point and would not obstruct the view of drivers entering or exiting the energy facility site.  
3 Section 152.011 is not applicable to the natural gas pipeline or the transmission line because no  
4 new roadway access point would be constructed in conjunction with these facilities.<sup>115</sup>  
5

6 Based upon the foregoing, the Council finds that the proposed energy facility complies with the  
7 requirements of UCDC Section 152.011.  
8

9 **§ 152.016 RIPARIAN VEGETATION; WETLAND DRAINAGE.**  
10

11 *(A) The following standards shall apply for the maintenance, removal and replacement of*  
12 *riparian vegetation along streams, lakes and wetlands which are subject to the provisions*  
13 *of this chapter:*  
14

15 *(1) No more of a parcel's existing vegetation shall be cleared from the setback and*  
16 *adjacent area than is necessary for uses permitted with a zoning permit, accessory*  
17 *buildings, and/or necessary access.*  
18

19 *(2) Construction activities in and adjacent to the setback area shall occur in such a*  
20 *manner so as to avoid unnecessary excavation and/or removal of existing vegetation*  
21 *beyond that required for the facilities indicated in subdivision (A)(1) above. Where*  
22 *vegetation removal beyond that allowed in subdivision (A)(1) above cannot be avoided,*  
23 *the site shall be replanted during the next replanting season to avoid water*  
24 *sedimentation. The vegetation shall be of indigenous species in order to maintain the*  
25 *natural character of the area.*  
26

27 *(3) A maximum of 25% of existing natural vegetation may be removed from the setback*  
28 *area.*  
29

30 *(4) The following uses and activities are excepted from the above standards:*  
31

- 32 *(a) Commercial forest practices regulated by the Oregon Forest Practices Act, being*  
33 *ORS 527.610 et seq.;*  
34 *(b) Vegetation removal necessary to provide water access for a water dependent*  
35 *use;*  
36 *(c) Removal of dead or diseased vegetation that poses a safety or health hazard;*  
37 *(d) Removal of vegetation necessary for the maintenance or replacement of*  
38 *structural shoreline stabilization.*  
39

---

<sup>115</sup> ASC, Exhibit K, K-46.

1       (5) In cases of zoning permits, land use actions which require site plan review or  
2       conditions for approval, and which are subject to provisions of this division, the review  
3       body shall prepare findings and address the maintenance, removal and replacement of  
4       riparian vegetation.  
5

6       The applicant identified streams and wetlands within the site boundary in Exhibit J of the ASC.  
7       As explained in that Exhibit, the above provisions are not applicable to the energy facility and  
8       the natural gas pipeline because there is no existing riparian vegetation along streams, lakes or  
9       wetlands in the setback area or elsewhere on the energy facility site and natural gas pipeline  
10      right of way. Additionally, no riparian vegetation would be removed at the energy facility site or  
11      the natural gas pipeline right of way. As stated in the ASC, no riparian vegetation would be  
12      removed in the transmission line ROW because the transmission line would use existing towers.  
13      Further, no access to the Umatilla River riparian area is anticipated because the proposed  
14      transmission, while upgrading the line, would utilize the existing towers that are already  
15      established and set back from the riparian area.<sup>116</sup>  
16

17      (B) Minor drainage improvements necessary to ensure effective drainage on surrounding  
18      agricultural lands shall be coordinated with the Oregon Department of Fish and Wildlife  
19      and Soil and Water Conservation District. Existing drainage ditches may be cleared to  
20      original specifications without review.  
21

22      As above, Subsection (B) is not applicable to the energy facility site because surrounding  
23      agricultural lands are engaged in dryland farming, and, according to the applicant, the  
24      topography indicates that such lands would drain away from the energy facility site.  
25      Additionally, this provision is not applicable to the transmission line or natural gas pipeline  
26      because neither are anticipated to alter drainage patterns on surrounding agricultural lands.<sup>117</sup>  
27      However, to the extent that minor drainage improvements are required, the Council adopts the  
28      following condition:  
29

30      **Condition E.3:** The certificate holder shall consult with the Oregon Department of Fish and  
31      Wildlife and the local Soil and Water Conservation District for any minor drainage  
32      improvements necessary to ensure effective drainage on surrounding agricultural lands.  
33

34      Based on the foregoing, and subject to compliance with the site certificate condition, the  
35      Council finds that the facility complies with the requirements of UCDC Section 152.016.  
36

37      **§152.017 CONDITIONS FOR DEVELOPMENT PROPOSALS.**  
38

39      (A) The proposed use shall not impose an undue burden on the public transportation system.  
40      Any increase meeting the definition of significant change in trip generation constitutes an

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<sup>116</sup> ASC, Exhibit K, K-48.

<sup>117</sup> ASC, Exhibit K, K-50.



1       undue burden.

2  
3       (B) For developments likely to generate a significant increase in trip generation, applicant  
4       shall be required to provide adequate information, such as a traffic impact study or traffic  
5       counts, to demonstrate the level of impact to the surrounding system. The scope of the  
6       impact study shall be coordinated with the providers of the transportation facility. Proposals  
7       that meet the requirements in §152.019(B) are subject to §152.019(C), Traffic  
8       Impact Analysis Requirements.

9  
10  
11       (C) The applicant or developer may be required to mitigate impacts attributable to the  
12       project. Types of mitigation may include such improvements as paving, installation or  
13       contribution to traffic signals, construction of sidewalks, bikeways, accessways or paths. The  
14       determination of impact or effect should be coordinated with the providers of affected  
15       transportation facilities.

16  
17       (D) Dedication of land for roads, transit facilities, sidewalks, bikeways, paths, or accessways  
18       may be required where the existing transportation system will be impacted by or is  
19       inadequate to handle the additional burden caused by the proposed use.

20  
21       “Significant change in trip generation” is defined in UCDC § 152.003 as follows:

22  
23       **SIGNIFICANT CHANGE IN TRIP GENERATION.** A change in the use of the property, including  
24       land, structures or facilities, or an expansion of the size of the structures or facilities causing  
25       an increase in the trip generation of the property exceeding: (1) for gravel surfaced County  
26       roads, 30 vehicles of less than 10,000 pounds Gross Vehicle Weight (GVW) and/or 20  
27       vehicles of greater than 10,000 pounds GVW; (2) for paved County roads, 75 vehicles of less  
28       than 10,000 GVW; and (3) for State paved Highways, 150 vehicles of 10,000 pounds GVW or  
29       less and/or 100 vehicles of greater than 10,000 pounds GVW.

30  
31       The applicant provided information regarding traffic impacts in Exhibit U of the ASC. As  
32       explained in that Exhibit, the energy facility site would be accessed by Westland Road, a paved  
33       county road. As explained in the Traffic Impact Analysis included in Exhibit U, all of the study  
34       intersections and critical movements would continue to operate acceptably during the weekday  
35       morning and evening peak hours. During the peak of construction, the projected construction  
36       effort is estimated to generate approximately 196 trips during each of the weekday morning  
37       and evening peak hours. The applicant anticipates that during operation, the facility will  
38       generate approximately 20 daily one-way vehicle trips. Eight full time employees are expected  
39       to generate 16 daily trips, with a daily average of two deliveries or visitors generating an  
40       additional four daily trips.<sup>118</sup> Based on the above daily average trips, the facility will not pose an

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<sup>118</sup> ASC, Exhibit K, K-51.

1 undue burden on the public transportation system. As stated in their comment, the County  
2 supports the applicant's traffic analysis. The natural gas pipeline and transmission line would  
3 not generate daily traffic and would only require intermittent access for maintenance and  
4 repairs. To minimize traffic impacts, the Council adopts conditions M.1, M.2, and M.3, discussed  
5 below in Section IV.M, which require the site certificate holder to work with Umatilla County  
6 and the county Public Works Department.

7  
8 Based on the foregoing, and subject to compliance with the site certificate condition, the  
9 Council finds that the facility complies with the requirements of UCDC Section 152.017.

10  
11 **§ 152.018 ACCESS MANAGEMENT AND STREET CONNECTIVITY**

12  
13 *(A) The intent of this code is to manage access to land development while preserving the*  
14 *flow of traffic in terms of safety, capacity, functional classification, and level of service.*  
15 *Major roadways, including highways, arterials, and collectors serve as the primary network*  
16 *for moving people and goods. These transportation corridors also provide access to*  
17 *businesses and homes and have served as the focus for commercial and residential*  
18 *development. If access points are not properly designed, these roadways will be unable to*  
19 *accommodate the needs of development and retain their primary transportation function.*  
20 *This code balances the right of reasonable access to private property with the right of the*  
21 *citizens of Umatilla County and the State of Oregon to safe and efficient travel. To achieve*  
22 *this policy intent, state and local roadways have been categorized in the Transportation*  
23 *System Plan by function and classified for access purposes based upon their level of*  
24 *importance and function. Regulations have been applied to these roadways for the purpose*  
25 *of reducing traffic accidents, personal injury, and property damage attributable to poorly*  
26 *designed access systems, and to thereby improve the safety and operation of the roadway*  
27 *network. This will protect the substantial public investment in the existing transportation*  
28 *system and reduce the need for expensive remedial measures. These regulations also further*  
29 *the orderly layout and use of land, protect community character, and conserve natural*  
30 *resources by promoting well-designed road and access systems and discouraging the*  
31 *unplanned subdivision of land.*

32  
33 *(B) This section shall apply to all arterials and collectors within the County and to all*  
34 *properties that abut these roadways.*

35  
36 *(C) This section is adopted to implement the access management policies of the County as*  
37 *set forth in the Transportation System Plan.*

38  
39 *(D) Proposed access within the I-82/US 730 Interchange Management Area Plan (IAMP)*  
40 *Management Area, shall be consistent with Section 7, Access Management Plan, of the*  
41 *IAMP.*  
42

1       (E) Corner Clearance

2  
3       (1) Corner clearance for connections shall meet or exceed the minimum connection  
4       spacing requirements for that roadway.

5  
6       (2) New connections shall not be permitted within the functional area of an intersection  
7       as defined by the connection spacing standards of this ordinance, unless no other  
8       reasonable access to the property is available.

9       (3) Where no other alternatives exist, the County may allow construction of an access  
10      connection along the property line farthest from the intersection. In such cases,  
11      directional connections (i.e. right in/out, right in only, or right out only) may be required.

12  
13     The energy facility site would comply with the corner clearance standards of the Umatilla  
14     County Transportation Plan, as the proposed driveway for the energy facility site would be  
15     approximately 250 feet south of the nearest driveway. To the north, the nearest driveway is  
16     approximately 670 feet from the proposed site access and to the south the nearest driveway is  
17     located approximately 580 feet from the proposed site-access driveway. The above provisions  
18     do not apply to the natural gas pipeline or transmission line because they would generate  
19     regular or frequent traffic and do not require additional access points.<sup>119</sup>

20  
21       (F) Joint Use Driveways and Cross Access.

22  
23       (1) Adjacent commercial or office properties identified as major traffic generators  
24       (generating more than 400 daily trips as defined by the Institute of Transportation  
25       Engineers Trip Generation Manual), shall provide a cross access drive and pedestrian  
26       access to allow circulation between sites.

27  
28       (2) A system of joint use driveways and cross access easements shall be established  
29       wherever feasible and shall incorporate the following:

30  
31           (a) A continuous service drive or cross access corridor extending the entire length of  
32           each block served to provide for driveway separation consistent with the access  
33           management classification system and standards.

34           (b) A design speed of 10 mph and a maximum width of 20 feet to accommodate two-  
35           way travel aisles designated to accommodate automobiles, service vehicles, and  
36           loading vehicles

37           (c) Stub-outs and other design features to make it visually obvious that the abutting  
38           properties may be tied in to provide cross-access via a service drive.

39           (d) A unified access and circulation system plan for coordinated or shared parking  
40           areas is encouraged.

---

<sup>119</sup> ASC, Exhibit K, K-53.

1  
2 (3) Shared parking areas shall be permitted a reduction in required parking spaces if  
3 peak demands do not occur at the same time periods.  
4

5 (4) Pursuant to this section, property owners shall:  
6

7 (a) Record an easement with the deed allowing cross access to and from other  
8 properties served by the joint use driveways and cross access or service drive;

9 (b) Record an agreement with the deed that remaining access rights along the  
10 roadway will be dedicated to Umatilla County and pre-existing driveways will be  
11 closed and eliminated after construction of the joint-use driveway;

12 (c) Record a joint maintenance agreement with the deed defining maintenance  
13 responsibilities of property owners.  
14

15 (5) Umatilla County may reduce required separation distance of access points where  
16 they prove impractical, provided all of the following requirements are met:  
17

18 (a) Joint access driveways and cross access easements are provided in accordance  
19 with this section.

20 (b) The site plan incorporates a unified access and circulation system in accordance  
21 with this section.

22 (c) The property owner enters into a written agreement with the county, recorded  
23 with the deed, that pre-existing connections on the site will be closed and eliminated  
24 after construction of each side of the joint use driveway (6) Umatilla County may  
25 modify or waive the requirements of this section where the characteristics or layout  
26 of abutting properties would make the development of a unified or shared access  
27 and circulation system impractical.  
28

29 The above provisions are not applicable to the energy facility site because there are no major  
30 traffic generators adjacent to the site. Additionally, these provisions are not applicable to the  
31 natural gas pipeline or transmission line because there are no major traffic generators adjacent  
32 and these facilities would not generate more than minimal, intermittent traffic demand.  
33

34 (G) Access Connection and Driveway Design.  
35

36 (1) Driveways shall meet the following standards:  
37

38 (a) If the driveway is a one way in or one way out drive, then the driveway shall be a  
39 minimum width of 10 feet and shall have appropriate signage designating the  
40 driveway as a one way connection.

41 (b) For two-way access, each land shall have a minimum width of 10 feet.  
42

1       (2) Driveway approaches must be designed and located to provide an exiting vehicle with  
2       an unobstructed view. Construction of driveways along acceleration or deceleration  
3       lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.

4       (3) The length of driveways shall be designed in accordance with the anticipated storage  
5       length for entering and exiting vehicles to prevent vehicles from backing into the flow of  
6       traffic on the public street or causing unsafe conflicts with on-site circulation.  
7

8       As explained in the ASC, the vehicle access point would be sized with two lanes at least 10 feet  
9       wide to allow for vehicles and truck traffic to enter and exit the site. Condition M.1, requires  
10      that all truck movements to the Station be directed to enter the site from the north as the site-  
11      access driveway cannot be designed to accommodate truck movements. Further, as stated in  
12      the ASC, the existing clear sight lines at the access point would be maintained providing exiting  
13      vehicles with unobstructed views of traffic along Westland Road. There are no acceleration or  
14      deceleration lanes in the vicinity of the access point.<sup>120</sup> This provision is not applicable to the  
15      natural gas pipeline or transmission line because no new driveway access points are required.  
16

17      (H) Nonconforming Access Features.

18  
19      (1) Legal access connections in place as of September 15, 2002 that do not conform with  
20      the standards herein are considered nonconforming features and shall be brought into  
21      compliance with applicable standards under the following conditions: When new access  
22      permits are requested; Change in use, enlargements, or improvements that will increase  
23      trip generation.  
24

25      This provision is not applicable because there are no existing non-conforming access  
26      connections.  
27

28      Based on the foregoing, the Council finds that the facility complies with the requirements of  
29      UCDC Section 152.018.  
30

31      **§ 152.545 ZONING PERMIT REQUIRED TO ERECT, MOVE, OR ALTER SIGNS;**  
32      **EXEMPTIONS; PERMITTED SIGNS**  
33

34      (A) No sign shall hereafter be erected, moved, or structurally altered without a zoning  
35      permit, except for a Type 1 and Type 3 sign, and without being in conformity with the  
36      provisions of this chapter. Official signs of the state, county or municipalities are exempt  
37      from all provisions of this chapter. All signs shall be on the same lot as the subject matter of  
38      the sign, except as specifically allowed otherwise.  
39

---

<sup>120</sup> ASC, Exhibit K, K-56.

1 (B) Allowed signs in the various zones are indicated by the following tables (for types of  
2 signs, see § 152.546):  
3

4 Signage for the energy facility site would be limited to directional signs for deliveries and  
5 general site circulation. As provided in the ASC, signage at the natural gas pipeline and  
6 transmission line would be limited to meeting public safety notice requirements. To ensure  
7 signage is limited as provided in the ASC, the Council adopts the following condition:  
8

9 **Condition E.4:** To reduce the visual impacts of the facility, the certificate holder shall:  
10

- 11 (a) Not allow any advertising to be used on any part of the facility;  
12 (b) Use only those signs required for facility safety, required by law or otherwise  
13 required by this site certificate, except that the certificate holder may erect  
14 directional signage for deliveries and site circulation;  
15 (c) Design signs in accordance with Umatilla County design requirements for signs as  
16 described in UCDC Section 152.545; and  
17 (d) Maintain any signs allowed under this condition in good repair.  
18

19 **§ 152.560 OFF-STREET PARKING REQUIREMENTS**  
20

21 (A) Each use shall provide the following minimum off-street parking spaces. Each parking  
22 space shall be a minimum of nine feet wide and 20 feet in length.  
23

24 (B) Off-street parking requirements.  
25

26 \*\*\*

27 (10) Industrial uses: one space per 200 square feet of public space, plus one space per  
28 employee.  
29

30 (11) Conditional uses: additional spaces may be required by the Hearings Officer in the  
31 approval of a conditional use.  
32

33 The energy facility will meet the required parking requirements for industrial uses. The  
34 applicant anticipates the Station would require 6 to 8 full time permanent staff and as provided  
35 in the ASC, the parking areas would include spaces for at least 10 standard cars and one  
36 handicapped vehicle. No parking spaces are required at the natural gas pipeline or the  
37 transmission line as there will be no full time employees and no public spaces.  
38

39 **§ 152.562 ADDITIONAL OFF-STREET PARKING AND LOADING REQUIREMENTS**  
40

41 (A) Should the owner or occupant of a lot or building change the use to which the lot or  
42 building is put, thereby increasing off-street parking or loading requirements, it shall be

1       *a violation of this chapter to begin such altered use until the required increase in off street*  
2       *parking or loading is provided;*

3  
4       As explained in the ASC, parking facilities for the energy facility would be developed during  
5       construction and the facility would not begin operations until such parking facilities are  
6       provided. This provision is not applicable to the natural gas pipeline or transmission line  
7       because parking is not required as neither the pipeline nor transmission lines are buildings and  
8       neither would support employees.

9  
10       *(B) Requirements for types of buildings and uses not specifically listed herein shall be*  
11       *determined by the Planning Commission or Hearings Officer, based upon the*  
12       *requirements of comparable uses listed;*

13  
14       As discussed above, based upon the information in the ASC, the proposed facility satisfies this  
15       standard as sufficient parking for industrial facilities is proposed.

16  
17       *(C) In the event several uses occupy a single structure or parcel of land, the total*  
18       *requirements for off-street parking shall be the sum of the requirements of the several uses*  
19       *computed separately;*

20  
21       As discussed above, sufficient parking would be provided at the energy facility site to meet the  
22       facility's needs.

23  
24       *(D) Owner of two or more uses, structures or parcels of land may agree to utilize jointly the*  
25       *same parking and loading spaces when the hours of operation do not overlap, provided that*  
26       *satisfactory legal evidence is presented to the Planning Director in the form of deeds, leases,*  
27       *or contracts to establish the joint use;*

28  
29       This provision is not applicable because no joint parking or loading facilities are to be developed  
30       as part of the project.

31  
32       *(E) Off-street parking spaces for dwellings shall be located on the same lot with the dwelling.*  
33       *Other required parking spaces shall be located no farther than 500 feet from the building or*  
34       *use they are required to serve, measured in a straight line from the building;*

35  
36       This provision is inapplicable because the applicant is not proposing dwellings as part of the  
37       project.

38  
39       *(F) Required parking spaces shall be available for the parking of operable passenger*  
40       *automobiles of residents, customers, patrons and employees only, and shall not be used*  
41       *for storage of vehicles or materials or for the parking of trucks used in conducting the*  
42       *business or use;*

1  
2 As stated in the ASC, the facility parking spaces would not be used for storage of vehicles or  
3 materials or for parking trucks.

4  
5 *(G) Unless otherwise provided, required parking and loading spaces shall not be located in a*  
6 *required yard;*

7  
8 No yard areas are required for the facility.

9  
10 *(H) Plans shall be submitted as provided in § 152.767 of this chapter;*

11  
12 See zoning discussion above.

13  
14 *(I) Design requirements for parking lots:*

15  
16 *(1) Areas used for standing and maneuvering of vehicles shall have paved surfaces*  
17 *maintained adequately for all weather use and so drained as to avoid flow of water*  
18 *across public sidewalks;*

19  
20 As stated in the ASC, the access point, driveway, internal roads and parking spaces would all be  
21 paved. Stormwater would be managed under the NPDES 1200-C permit and stormwater runoff  
22 during operation would be collected in a detention basin allowed to percolate into the ground,  
23 and not run across public sidewalks.

24  
25 *(2) Except for parking to serve residential use, parking and loading areas adjacent to*  
26 *residential use shall be designed to minimize disturbance of residents by the erection*  
27 *between the uses of a sight obscuring fence of not less than five feet in height except*  
28 *where vision clearance is required;*

29  
30 This provision is not applicable because there are no residential uses adjacent to the station.

31  
32 *(3) Parking spaces along the outer boundaries of a parking lot shall be contained by a*  
33 *curb at least four inches high and set back a minimum of four and one-half feet from the*  
34 *property line, or by a bumper rail;*

35  
36 The applicant proposes to provide the required curb or bumper rail facilities and setbacks.

37  
38 *(4) Artificial lighting which may be provided shall not create or reflect glare in a*  
39 *residential zone or on any adjacent dwelling;*

40  
41 This provision is not applicable because there are no residential zones or dwellings adjacent to  
42 the station.



1  
2       (5) Service drives to off-street parking areas of four or more spaces shall be clearly and  
3       permanently marked and defined through use of rails, fences, walls, or other barriers or  
4       markers on frontage not occupied by service drives;  
5

6 The single driveway access point to the Station would be clearly and permanently marked.  
7

8       (6) Service drives shall have a minimum vision clearance area bounded by the driveway  
9       centerline, the street right-of-way line, and a straight line joining said lines 20 feet from  
10      their intersection.  
11

12 Vision clearance would be kept clear and free of any visual obstructions.  
13

14 Based upon the foregoing, the Council finds that the facility complies with the requirements of  
15 UCDC Sections 152.560 and 152.562.  
16

#### 17 **G. Umatilla County Transportation System Plan** 18

19 Umatilla County's Transportation System Plan is implemented through the County  
20 Development Code. Based upon the above discussion, the Council finds that the facility  
21 complies with all relevant requirements, including the Access Management provisions of UCDC  
22 Section 152.018.  
23

#### 24 **H. Comprehensive Plan Policies** 25

26 UCDC Section 152.612(C) provides that a conditional use permit "will not be approved  
27 unless the proposed use of the land will be in conformance with the County Comprehensive  
28 Plan." The County SAG identified the applicable policies of the UCCP. The SAG indicated that  
29 "most, if not all" of the identified policies are implemented through the UCDC. The Council finds  
30 that the facility complies with the identified applicable policies of the UCCP for the reasons  
31 discussed below.  
32

#### 33 **Citizen Involvement** 34

35       *Policy 1: Provide information to the public on planning issues and programs, and encourage*  
36       *continuing citizen input to planning efforts.*  
37

38       *Policy 5: Through appropriate media, encourage those County residents' participation during*  
39       *both city and county deliberation proceedings.*  
40

41 The identified Citizen Involvement policies are procedural and do not contain substantive  
42 standards applicable to the siting of the proposed facility. The applicant has elected to have the

Council make the land use decision in accordance with ORS 469.504(1)(b), and therefore the Council's procedural requirements apply. The Council's procedure for making a site certificate decision is a public process. The application is a public document that has been made available for public viewing. The documents issued by the department are public documents, most of which are posted on the department's Internet website. The department uses direct mailing, newspaper publication and the Internet to inform the public about the proceedings regarding the proposed facility. Opportunities for public comment are provided throughout the ASC review process. On April 14, 2015, the department issued a public notice of the Draft Proposed Order to the Council's general mailing list and to adjacent property owners; and published notice of the Draft Proposed Order in the East Oregonian, a newspaper of general circulation in the area of the facility. The public notice and newspaper notice contained an announcement of a public hearing, which the department held on May 14, 2015 in Hermiston, Oregon. The comment deadline and close of the public record on the Draft Proposed Order was May 14, following completion of the public hearing. No persons requested party status in the contested case proceeding.

Based on the above, to the extent it constitutes an approval criterion, the Council finds that the facility complies with the above Umatilla County Comprehensive Plan Policy.

#### **Agriculture**

*Policy 1: Umatilla County will protect, with Exclusive Farm Use zoning pursuant to ORS 215, lands meeting the definition of farmland in this plan and designated as Agricultural on the Comprehensive Plan Map.*

The County has established an EFU zone and has implemented ordinances to protect farmland. The proposed energy facility is located within the County's EFU zone and allowed as a conditional use. The applicable ordinances and the facility's compliance with each are addressed in the sections above. The natural gas pipeline and transmission line are both permitted uses in the EFU zone, as addressed above as well.

The step-up substation<sup>121</sup> would occupy approximately three acres of farmland, within a transmission corridor already occupied by various transmission facilities. The adjacent underground line would be similarly located adjacent to the McNary Substation in an area heavily developed with power transmission infrastructure. As a result, the step-up substation and underground line would have a minor impact on agricultural activities.

Based on the above, the Council finds that the facility complies with Policy 1, above.

---

<sup>121</sup> The step-up substation is discussed further below with regard to the City of Umatilla applicable substantive criteria; however, compliance with the Umatilla County Comprehensive Plan is required; therefore, the Council has included the substation as part of this section.

1       *Policy 8: The county shall require appropriate procedures/standards/policies be met in the*  
2       *Comprehensive Plan and Development Ordinance when reviewing nonfarm uses for*  
3       *compatibility with agriculture.*

4  
5       The County identified the applicable standards and policies for reviewing the proposed facility  
6       and has participated in the Council's site certificate application review process in accordance  
7       with ORS 469.504.

8  
9       *Policy 17: Continue to encourage timber management to occur on lower elevation seasonal*  
10       *grazing as permitted in the Exclusive Farm Use Zone*

11  
12       This provision is not applicable because there are no timber resources in the vicinity of the  
13       energy facility, the natural gas pipeline or the transmission line.

14  
15       **Open Space, Scenic and Historic Areas, and Natural Resources**

16  
17       *Policy 1: (a) The County shall maintain this resource by limiting development mainly to*  
18       *existing built up areas.*

19  
20       There are no inventoried significant natural areas or significant scenic areas on the energy  
21       facility site. Further, the location of the energy facility, adjacent to the Hermiston Generating  
22       Plant, a railroad and other industrial uses, minimize the impact the proposed facility on open  
23       space, scenic and historic areas, and natural areas. Moreover, the energy facility site is  
24       approximately 20 acres. The natural gas pipeline will be located underground and located  
25       within an existing right of way, which significantly minimizes the impact of the pipeline on the  
26       open space, scenic and historic areas and natural resources. Moreover, the applicant proposes  
27       to reconductor an existing line, utilizing the existing infrastructure which minimizes its impact  
28       on open space, scenic and historic areas, and natural resources. Based on the above, the  
29       Council finds that the facility complies with Policy 1(a).

30  
31       *Policy 5: (a) The County shall maintain rural agricultural lands, Development shall*  
32       *be of low density to assure retention of upland game habitat,*

33  
34       *(b) Land uses should maintain the vegetation along streambanks, fence rows, woodlots,*  
35       *etc. Research ways to reduce harassment and loss of upland game by free roaming dogs*  
36       *and cats.*

37  
38       The County development code allows the energy facility to be located within EFU-zoned lands  
39       subject to the ordinances discussed above. There is limited vegetation on the site and the site  
40       would be fenced to reduce the potential impacts on upland game. Both the transmission line  
41       and natural gas pipeline are permitted within the EFU-zoned lands and both would be primarily  
42       located within existing right of ways, thereby minimizing impacts to rural agricultural lands.

1  
2 The step-up substation would occupy about three acres of lands in an area used for agricultural  
3 uses and already occupied by other transmission facilities. There are no fence rows, woodlots,  
4 or riparian vegetation in the vicinity of the step-up substation or underground line. Given the  
5 agricultural use and infrastructure development in the area, the applicant states that the step-  
6 up substation site does not serve as upland game habitat. No hunting is permitted on the BPA  
7 and BLM properties on which the substation and underground line would be located.  
8 Based on the above, the Council finds that the facility complies with Policy 5(a).  
9

10 *Policy 6: (a) Developments or land uses that require drainage, channelization, filling or*  
11 *excessive removal of riparian vegetation in sensitive waterfowl areas should be identified*  
12

13 As described above, the development of the energy facility site and natural gas  
14 pipeline/transmission line are not expected to have any impact on riparian areas and no  
15 drainage, channelization, filling or removal of riparian vegetation would occur along the  
16 transmission line ROW.  
17

18 *Policy 8. (a) Setbacks shall be established to protect significant and other wetlands*  
19

20 As discussed above, the energy facility meets the stream and wetland setback requirements  
21 established in the UCDC. There are no wetlands in the natural gas pipeline route and utilization  
22 of the existing transmission towers would avoid any impacts from the transmission line on  
23 wetlands. Based on the above, the Council finds that the facility complies with Policy 8(a).  
24

25 *Policy 9 (a) The County shall encourage land use practices which protect and enhance*  
26 *significant wetlands.*  
27

28 As described above, the energy facility complies with the stream and wetland setback  
29 requirements of the UCDC. No wetlands would be impacted by construction or operation of the  
30 proposed facility. Therefore, the Council finds that the facility complies with Policy 9(a).  
31

32 *Policy 10*  
33

34 *(c) Compatible land use shall maintain the riparian vegetation along streams in the*  
35 *floodplain. Stream bank vegetation shall be maintained along streams outside of the*  
36 *floodplain by utilizing appropriate setbacks.*  
37

38 *(d) Development or land use that requires channelization, excessive removal of*  
39 *streamside vegetation, alteration of stream banks and filling into stream channels shall*  
40 *be restricted in order to maintain streams integrity.*  
41

42 *(e) New roads, bridges and access rights-of-way shall be designed to avoid channel*

1           *capacity, and minimize removal of shoreline vegetation.*

2  
3   As described above, the energy facility meets the stream and wetland setback requirements  
4   and no wetlands would be impacted by construction and operation of the energy facility. There  
5   are no wetlands in the natural gas pipeline right of way and utilization of the existing  
6   transmission towers would avoid any additional impact of the transmission line on wetlands in  
7   the transmission corridor. The bridge to be constructed across the existing Westland Irrigation  
8   District canal is proposed to be designed to prevent any impact on the capacity of the canal and  
9   to minimize removal of vegetation along the canal. As stated in the ASC, facility roads would  
10   not impact any riparian areas, stream capacity or shoreline vegetation because there are no  
11   natural streams or riparian or shoreline vegetation on the site. Further no new roads or bridges  
12   or access are proposed related to the natural gas pipeline and transmission line.

13  
14   As explained in the ASC, there are no waterways or riparian vegetation in the vicinity of the  
15   step-up substation or underground line, so the construction of the substation would not impact  
16   channel capacity or riparian vegetation.

17  
18   Based on the above, the Council finds that the facility complies with Policy 10 (c), (d) and (e).

19  
20       *Policy 20:*

21       *(a) Developments of potentially high visual impacts shall address and mitigate adverse*  
22       *visual effects in their permit application, as outlined in the Development Ordinance*  
23       *standards,*

24       *(b) It is the position of the County that the Comprehensive Plan designations and zoning*  
25       *already limit scenic and aesthetic conflicts by limiting land uses or by mitigating conflicts*  
26       *through ordinance criteria. However, to address any specific, potential conflicts, the*  
27       *County shall insure special consideration of the following when reviewing a proposed*  
28       *change of land use:*

29           1. *Maintaining natural vegetation whenever possible.*

30           2. *Landscaping areas where vegetation is removed and erosion might result.*

31           3. *Screening unsightly land uses, preferably with natural vegetation or landscaping*

32           4. *Limiting rights-of-way widths and numbers of roads intersecting scenic roadways*  
33           *to the minimum needed to safely and adequately serve the uses to which they*  
34           *connect.*

35           5. *Limiting signs in size and design so as not to distract from the attractiveness of the*  
36           *area.*

37           6. *Siting developments to be compatible with surrounding area development, and*  
38           *recognizing the natural characteristics of the location.*

39           7. *Limiting excavation and filling only to those areas where alteration of the natural*  
40           *terrain is necessary, and revegetating such areas as soon as possible.*

41           8. *Protection vistas and other views which are important to be recognized because of*  
42           *their limited number and importance to the visual attractiveness of the area.*

1  
2 As explained in the ASC, a visual impact study was prepared to assess potential impacts on  
3 visual resources and no significant adverse visual impacts were identified. The results of the  
4 visual resource analysis are discussed in more detail below. Condition J.1, addresses measures  
5 to reduce the visual impact of the proposed facility. Additionally, Condition D.3 requires the  
6 certificate holder to restore vegetation disturbed during construction in accordance with the  
7 applicant's Revegetation Plan. Condition E.4 requires the certificate holder to comply with  
8 UCDC sections 152.545, which addresses design standards for signs. Based on the above, and  
9 subject to compliance with the above listed conditions, the Council finds that the facility  
10 complies with Policy 20.

11  
12 *Policy 22. The County shall cooperate with state agencies and other historical organizations*  
13 *to preserve historic buildings and sites, cultural areas, and archeological sites and*  
14 *artifacts.*

15  
16 *Policy 23: (a) Umatilla County shall encourage and cooperate in developing a detailed*  
17 *county-wide historic site inventory....*

18  
19 *Policy 24: (a) Umatilla County shall protect significant historical and cultural sites from land*  
20 *use activities which diminish their value as historical resources....*

21  
22 *Policy 26: The County shall cooperate with the Tribe, Oregon State Historic Preservation*  
23 *Office, and others involved in... identifying and protecting Indian cultural areas and*  
24 *archeological sites.*

25  
26 The applicant addressed the potential impacts of the proposed facility on historic, cultural and  
27 archaeological resources in Exhibit S of the application. The facility's compliance with the  
28 Council's Historic, Cultural and Archaeological Resources Standard is discussed below, including  
29 required site certificate conditions. The State Historic Preservation Office is a reviewing agency  
30 in the Council's site certificate process and SHPO received a copy of the complete site  
31 certificate application as required under ORS 469.350. SHPO submitted comment on the  
32 preliminary application for site certificate and concurred with the applicant's findings of no  
33 adverse effect due to the proposed project.<sup>122</sup> In addition, the department identified the  
34 Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of Warm Springs,  
35 Nez Perce Tribe and Yakama Nation as reviewing agencies and provided each with a copy of the  
36 ASC to review. Therefore, the Council finds that the facility complies with Policy 22, Policy 23(a),  
37 Policy 24(a) and Policy 26, above.

38  
39 *Policy 37. The County shall ensure compatible interim uses provided through Development*

---

<sup>122</sup> PERAPPDoc18

1       *Ordinance standards, and where applicable consider agriculturally designated land as open*  
2       *space for appropriate and eventual resource or energy facilities use.*

3  
4       The facility is proposed to be located adjacent to the existing Hermiston Generating Plant, a  
5       railway line and other industrial uses. However, the County did not identify any ordinance  
6       standards that “ensure compatible interim uses,” nonetheless, the policy does states that  
7       where applicable the County should consider agriculturally designated land as appropriate for  
8       energy facility use.

9  
10       *Policy 38.*

11       *(a) The County shall encourage mapping of future agencies sites, ensure their protection*  
12       *from conflicting adjacent land uses, and required reclamation plans.*

13       *(b) Aggregate and mineral exploration, extraction, and reclamation shall be conducted in*  
14       *conformance with the regulations of the Department of Geology and Mineral Industries.*

15       *(c) The County Development Ordinance shall include conditional use standards and other*  
16       *provisions to limit or mitigate conflicting uses between aggregate sites and surrounding*  
17       *land uses.*

18  
19       *Policy 39.*

20       *(a) The County shall strictly enforce state and county development standards pertaining*  
21       *to gravel extraction/processing uses through appropriate agencies; whether new*  
22       *operations or expansions of existing sites*

23  
24       As explained in the ASC, no inventoried aggregate sites would be affected by the project and  
25       there are no inventoried aggregate sites at the energy facility site or along the natural gas  
26       pipeline route. According to the ASC, there are several inventoried aggregate resource sites  
27       along the transmission line right of way; however, the facility is proposed to utilize the existing  
28       transmission towers and would only upgrade the transmission line, in the vicinity of the  
29       identified aggregate resources. Consequently, the proposed reconducted transmission line  
30       would not impact the aggregate resources as no new construction would be necessary.<sup>123</sup>  
31       Therefore, the Council finds that the facility complies with Policy 38 (a), (b) and (C) and Policy  
32       39, above.

33  
34       *Policy 42 (a) Encourage development of alternative sources of energy*

35  
36       The proposed facility is intended to help balance the fluctuating load from regional wind power,  
37       which would help to stabilize the grid and foster further development of renewables, according  
38       to the ASC. Therefore, the Council finds that the facility complies with Policy 42(a).

39  
40       **Air, Land, Water Qualities Policies**

---

<sup>123</sup> ASC, Exhibit K, K-78.

1  
2 *Policy 1. Discharges from existing and future developments shall not exceed applicable*  
3 *environmental standards.*

4  
5 As explained in the ASC, stormwater runoff occurring during Station construction and  
6 associated activities would be managed as required by a NPDES 1200-C permit issued by DEQ.  
7 Stormwater runoff during operation of the Station would be collected in a detention basin and  
8 allowed to percolate into the ground. Neutralized demineralized wastewater from the onsite  
9 water treatment system would be used as turbine water injection for nitrogen oxide emission  
10 control. As proposed, that cooling tower blowdown would be routed to the HGP for reuse as  
11 process water in that facility and subsequent reuse at the adjacent Lamb Weston agricultural  
12 processing plant. In the event HGP and Lamb Weston are unable to accept blowdown water  
13 from the Station, the applicant would utilize a ZLD system for onsite management of its  
14 wastewater, as detailed in Exhibit V.

15  
16 Sanitary waste would be disposed of through a new sanitary leach field system to be  
17 constructed on the energy facility site. Combustion turbine water wash would be collected in a  
18 holding tank, tested to determine the concentrations of the constituent's present, and trucked  
19 offsite for disposal at an approved facility. The transmission line and natural gas pipeline would  
20 not discharge pollutants to surface water or groundwater during operation.

21  
22 Therefore, the Council finds that the facility complies with Air, Land, Water Qualities Policy 1.

23  
24 *Policy 7. Consider cumulative noise impacts and compatibility of future developments,*  
25 *including the adoption of appropriate mitigating requirements of plan updates.*

26  
27 The applicant addressed the potential noise impacts of the proposed facility in Exhibit X of the  
28 ASC. And as discussed below, the facility would comply the applicable noise limits. Therefore,  
29 the Council finds that the facility complies with Air, Land, Water Qualities Policy 7.

30  
31 *Policy 8 Recognize that protection of existing wells has priority over development proposals*  
32 *requiring additional subsurface sewage disposal.*

33  
34 As provided in the ASC, construction of the sanitary septic leach field would not impact any  
35 existing wells and it would comply with all DEQ construction, operation and setback  
36 requirements. Based on the information provided, the Council finds that the facility complies  
37 with Air, Land, Water Qualities Policy 8.

38  
39 **Natural Hazards Policies**  
40



1       *Policy 1. The County will endeavor, through appropriate regulations and cooperation with*  
2       *applicable governmental agencies, to protect life and property from natural hazards and*  
3       *disasters found to exist in Umatilla County.*

5       *Policy 4. Active earthquake fault lines have not been conclusively identified in the County.*

7       The applicant provided information regarding an analysis of seismic hazards and non-seismic  
8       geological hazards in Exhibit H of the application. The Council's Structural Standard, which  
9       addresses the risk to public safety from such hazards is discussed below and includes required  
10      site certificate conditions for compliance. Therefore, the Council finds that the facility, subject  
11      to compliance with the site certificate conditions, complies with Natural Hazards Policies 1 and  
12      4.

#### 14      **Recreational Needs Policies**

16      *Policy 1. Encourage and work with local, state, federal agencies and private enterprise to*  
17      *provide recreational areas and opportunities to citizens and visitors to the County.*

19      The proposed facility is not located within an established recreational area. The applicant  
20      provided information regarding the proposed facility's potential impact on recreational  
21      opportunities in Exhibit T of the application. As discussed below the proposed facility would  
22      comply with the Council's Recreational Standard. Therefore, the Council finds that the facility  
23      complies with Recreational Needs Policy 1.

#### 25      **Economy of the County**

27      *Policy 1: Encourage diversification within existing and potential resource-based industries.*

29      *Policy 4: Participate in selected economic development programs and projects applicable to*  
30      *the County's desired growth.*

32      *Policy 8. Evaluate economic development proposals upon the following:*

33      *Will the proposal:*

34          *(a) Increase or decrease available [water] supplies?*

35          *(b) Improve or degrade qualities?*

36          *(c) Balance withdrawal with recharge rates?*

37          *(d) Be a beneficial use?*

38          *(e) Have sufficient quantities available to meet needs of the proposed project and other*  
39          *existing and [reasonably] anticipated needs?*

40          *(f) Reduce other use opportunities and if so will the loss be compensated by other equal*  
41          *opportunities?*

1 As stated in the ASC, the facility would have an economic development impact on Umatilla  
2 County, through temporary construction jobs and permanent utility operations and  
3 maintenance jobs. Further the facility is less than 20 acres in size, which accounts for less than  
4 0.002% of Umatilla County cropland. Therefore, no impacts on aggregate mining, timber  
5 harvesting or other resource based industries would be impacted by the facility and the facility  
6 would diversify the area.

7  
8 Moreover, as explained in Exhibit K, the facility would have minimal impact on the existing  
9 agricultural economy of the region and would not hinder the achievement of any County  
10 economic development programs. However, the County has not identified any “selected  
11 economic development programs” that would be applicable to the proposed facility.

12  
13 As explained in Exhibit O of the ASC and discussed below, the Port of Umatilla would provide  
14 water service to the site and there are sufficient quantities of water available as confirmed by  
15 the Port of Umatilla.<sup>124</sup> The energy facility’s use would not have any impact on the availability of  
16 the water supplies and the facility would not withdraw groundwater for its water supply.  
17 Further, as stated in Exhibit V of the ASC, there would be no direct discharge of water to surface  
18 or groundwater; therefore, there would be no impact on water quality.<sup>125</sup>

19  
20 Beneficial use is defined by Oregon Water Resource regulations as the “Reasonably  
21 efficient use of water without waste for a purpose consistent with the laws and the best  
22 interests of the people of the state.”<sup>126</sup> The Port of Umatilla’s Permit is for “municipal water  
23 use,” defined by regulation as “the delivery and use of water through the water service system  
24 of a municipal corporation for all water uses usual and ordinary to such systems,” specifically  
25 including “industrial water use.”<sup>127</sup> “Industrial water use” includes water used for “non-  
26 hydroelectric power production.”<sup>128</sup> As provided in the ASC, water use at the Energy Facility Site  
27 would be reasonably efficient, utilizing approximately 1,300 gallons per day, and serves the best  
28 interests of the state by enabling the development of necessary load-balancing electrical  
29 production. Thus, the use of the Port’s municipal water right for power production purposes is  
30 a “beneficial use” consistent with the regulations.

31  
32 For these reasons, the Council finds that the facility complies with Economy of the County,  
33 Policies 1, 4 and 8.

34  
35 **Public Facilities and Services Policies**  
36

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<sup>124</sup> See Exhibit O of the ASC.

<sup>125</sup> ASC, Exhibit K, K-81.

<sup>126</sup> OAR 690-250-0010(3).

<sup>127</sup> OAR 690-300-0010(29).

<sup>128</sup> OAR 690-300-0010(25).

1 *Policy 1. The county will control land development in a timely, orderly, and efficient manner*  
2 *by requiring that public facilities and services be consistent with established levels of rural*  
3 *needs consistent with the level of service requirements listed on pages J-27 and J-28 of the*  
4 *Technical Report. Those needs are identified as follows:*

5 *(a) Fire protection shall be provided consistent with Policies 8, 9, 10*

6 *(b) Police protection shall be provided consistent with Policy 7.*

7 *(c) Surface. Water Drainage-Roadside drainage shall be maintained and plans for*  
8 *drainage shall be required in multiple use areas.*

9 *(d) Roads shall be maintained or improved to standards adopted by the County Road*  
10 *Department which are consistent with nationally accepted standards that correlate*  
11 *traffic to desired road conditions.*

12  
13 *Policy 2: Require that domestic water and sewage disposal systems for rural areas be*  
14 *provided and maintained at levels appropriate for rural use only. Rural services are not to be*  
15 *developed to support urban uses.*

16  
17 *Policy 9. Require adequate water supplies for fire fighting as part of significant new*  
18 *developments in rural areas in coordination with the appropriate rural fire district.*

19  
20 *Policy 19. Where feasible, all utility lines and facilities shall be located on or adjacent to*  
21 *existing public or private rights-of-way so as to avoid dividing existing farm or forest units;*  
22 *and transmission lines should be located within existing corridors as much as possible.*

23  
24 Subsections (a) and (b) incorporate policies 7, 8, 9 and 10 regarding fire protection and police  
25 protection. Policies 7, 8 and 10 do not contain standards applicable to siting the proposed  
26 facility. Policy 9 is discussed below. The applicant addressed the proposed facility's potential  
27 impacts on fire response and police protection services in Exhibit U of the application. The  
28 Council's analysis and the required conditions are discussed below in response to the Council's  
29 Public Services Standard. However, as discussed in that section, there are no expected  
30 significant adverse impacts to service providers in the area expected.<sup>129</sup>

31  
32 As discussed above, the Station would be constructed to prevent stormwater from leaving the  
33 site and this would be achieved by grading the site and installing stormwater detention soil  
34 berms around the station and a stormwater detention basin. The applicant provided a traffic  
35 impact analysis in Exhibit U of the ASC and based upon the results of that study, the traffic level  
36 of service and vehicle to capacity ratio would remain at or above all relevant standards on  
37 studied intersections through the construction and operation phases. As explained in the ASC,  
38 water service to the site would be provided by the Port of Umatilla. The applicant would not  
39 use the water line extension to support additional residential or commercial development.  
40 Adequate water for firefighting would be provided by the Port of Umatilla and the facility would

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<sup>129</sup> ASC, Exhibit K, K-83.

1 have an onsite fire protection system (See Condition M.7). The entire length of the natural gas  
2 pipeline and the majority of the transmission line would be located within the existing right of  
3 ways. The only new transmission lines are necessary to connect the transmission line to the  
4 station and it would not divide existing farm or forest units, as explained in the ASC.<sup>130</sup>

5  
6 Based on the above information, the Council finds that the facility complies with Public Facilities  
7 and Services Policies 1, 2, 9 and 19.

8  
9 **Transportation Policies**

10  
11 *Policy 18. The County will review right-of-way acquisitions and proposals for transmission*  
12 *lines and pipelines so as to minimize adverse impacts on the community.*

13  
14 *Policy 20. Request larger industrial and commercial development proposals, consider*  
15 *sponsoring carpooling programs.*

16  
17 The entire length of the natural gas pipeline would be located within the existing HGP right of  
18 way. Further, the majority of the proposed transmission line would be located within the  
19 existing right of way. A limited new transmission line right of way may be needed to cross the  
20 UPRR line from the energy facility site and across Westland Road to the adjacent LI-zoned lands.  
21 The limited nature of the new right of way and its location adjacent to the existing uses of a  
22 similar nature would minimize the impact of any new right of way. The Station would only  
23 require approximately 6 to 8 full time employees during operations. Therefore, a carpooling  
24 program is not necessary.

25  
26 Based on this information, the Council finds that the facility complies with Transportation  
27 Policies 18 and 20.

28  
29 **Energy Conservation Policies**

30  
31 *1. Encourage rehabilitation/weatherization of older structures and the utilization of locally*  
32 *feasibly renewable energy resources through use of tax and permit incentives*

33  
34 The use of local tax incentives to encourage this development is not a standard applicable to  
35 the proposed facility. As stated in the ASC, the facility would help to stabilize the electric power  
36 grid because it would provide load shaping of the irregular wind-generated electricity in the  
37 region. Therefore, the Council finds that the facility complies with Energy Conservation Policy 1.

38  
39 Based upon the above considerations, the Council finds that the facility complies with the  
40 Umatilla County Comprehensive Plan.

---

<sup>130</sup> ASC, Exhibit K, K-84.

1  
2 In a comment submitted in response to the DPO, the Umatilla County Board of County  
3 Commissioners<sup>131</sup> requested that the Council specifically list each land use permit to be issued  
4 by the County as part of Condition B.6, above, which requires the certificate holder to obtain all  
5 necessary federal, state and local permits or approval. As discussed above, pursuant to ORS  
6 469.503(3), after issuance of a site certificate, any affected state agency, county, city and  
7 political subdivision must, upon submission by the applicant of the proper application and  
8 payment of proper fees, but without hearings of other proceedings, promptly issue the permits,  
9 licenses and certificates addressed in the site certificate. Further, in the above review of the  
10 facility's compliance with the county's applicable substantive criteria, the Council has  
11 necessarily identified each required County conditional use permit and zoning permit.  
12 Nonetheless, in response to the County's comment, the applicant proposed condition language,  
13 which was provided to the Council for consideration during its review of the DPO. The Council  
14 adopts the applicant's proposed condition language:

15  
16 **Condition E.5:** Prior to beginning construction, the certificate holder shall obtain all  
17 required land use approvals from Umatilla County as listed in the letter from the Umatilla  
18 County Board of Commissioners dated May 14, 2015, and shall submit all associated  
19 applications and pay all associated application fees.  
20

21  
22 **IV.E.1.b. Applicable Substantive Criteria – City of Umatilla**

23  
24 **I. 1972 Umatilla County Zoning Ordinance**

25 As explained in the ASC, the proposed transmission line crosses several areas that are within  
26 the City of Umatilla Urban Growth Area. The step-up substation and underground line are  
27 proposed to be located entirely within the Urban Growth Area. The urban growth area is an  
28 area inside the City's urban growth boundary but outside of the city limits. The property within  
29 the urban growth area has a "UGB Plan Designation" on the City of Umatilla Plan Map, but that  
30 designation only reflects the intended land use designation for the property when it is annexed  
31 to the City; it does not regulate the current use of the lands. There is a Joint Management  
32 Agreement pursuant to which the City and the County cooperate in managing the UGA. The  
33 Joint Management Agreement indicates that it is the 1972 Umatilla County Zoning Ordinance  
34 that is in effect for the UGA. Thus, the land within the UGA is governed by the provisions of the  
35 1972 Umatilla County Zoning Ordinance, not the current development code discussed above.

36 The transmission line crosses several zones within the UGA (F-1, F-2, M-2 and R-1) and the step-  
37 up substation and underground line are located entirely within the F-1 zone.  
38

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<sup>131</sup> PERAPPDoc31. Tamra Mabbott, Umatilla County Planning Director also provided oral testimony during the public hearing on May 14th, on behalf of the Umatilla County Board of County Commissioners, reiterating the County's submitted comments.

1 **A. Exclusive Farm Use Zone (F-1)**

2  
3 **Section 3.010 DESCRIPTION AND PURPOSE**

4  
5 *The F-1 Exclusive Farm Zone is designed to maintain the agricultural economy of the county*  
6 *by reserving farmland for exclusive agricultural use. It is directly related to certain tax*  
7 *provisions in Oregon Statutes and has been taken from ORS 215.203 and 215.213. Please*  
8 *see Addenda for further explanation.*  
9

10 As explained in the ASC, the Station would utilize an existing transmission line right of way  
11 through the F-1 zoned lands. The ROW is located in an existing transmission easement that runs  
12 to the McNary Substation and the transmission line would utilize existing transmission towers  
13 along the length of the line. A proposed connecting structure and step-up substation would be  
14 constructed in an area with an already-high density of existing power lines and transmission  
15 towers. The new step-up substation would be constructed on approximately 3 acres. An  
16 underground line would connect the step-up substation with the McNary Substation. The  
17 applicant proposes to obtain a new ROW from BPA for the step-up substation location and the  
18 portion of the underground line on BPA property. The McNary Substation and the immediately  
19 surrounding lands located north of the railroad line are owned by the U.S. Bureau of Land  
20 Management, and managed by the Army Corps of Engineers. The applicant states that it is  
21 coordinating with these entities to obtain a ROW for the portion of the underground line north  
22 of the railroad tracks and the underground termination structure needed to connect the step-  
23 up substation with the McNary Substation.  
24

25 **Section 3.012 USES PERMITTED OUTRIGHT**

26  
27 *In an F-1 Zone, the following uses and their accessory uses are permitted upon the issuance*  
28 *of a zoning permit:*

29 \*\*\*

30  
31 *(5) Utility facilities necessary for public service except commercial facilities for the*  
32 *purpose of generating power for public use by sale.*  
33

34 As discussed above in relation to UCDC § 152.059 above, the existing transmission line qualifies  
35 as a utility facility necessary for public service and therefore is permitted outright upon the  
36 issuance of a zoning permit. No new transmission towers are proposed to be constructed in the  
37 F-1 zone, and Umatilla County's *Response to Amended Notice of Intent* dated September 23,  
38 2013 indicates that "[n]o land use permit is required to co-locate and upgrade the transmission  
39 line."  
40

41 Further, the connecting structure, step-up substation, risers, and underground line are utility  
42 facilities necessary for public service, and are therefore permitted outright. As discussed above,

1 under ORS 215.275(1), a utility facility established under ORS 215.283(1)(c) is necessary for  
2 public service if the facility “must be sited in an exclusive farm use zone in order to provide the  
3 service.” To demonstrate that a utility facility is necessary under ORS 215.283(1)(c), ORS  
4 215.275(2) requires an applicant to show that reasonable alternatives have been considered  
5 and that the facility must be sited in an EFU zone based on one or more of the following:  
6

7 *a. Technical and engineering feasibility;*  
8

9 As explained in the ASC, the step-up substation is necessary to step up the 230kV power  
10 generated by the energy facility to the 500-kV power needed to connect to the McNary  
11 Substation. Step-up substations are commonly used and are technically feasible to perform this  
12 function.  
13

14 *b. The proposed facility is locationally dependent. A utility facility is locationally dependent if*  
15 *it must cross lands in one or more areas zoned for exclusive farm use in order to achieve a*  
16 *reasonably direct route or to meet unique geographical needs that cannot be satisfied on*  
17 *other lands;*  
18

19 As stated in the ASC, it is necessary to site the step-up substation close to the McNary  
20 Substation to provide a reasonably direct connection between the two. As provided in the ASC,  
21 there are no potential locations for the substation adjacent to the McNary Substation and  
22 within the existing ROW that are not zoned EFU. Therefore, the step-up substation is  
23 locationally dependent.  
24

25 *c. Lack of available urban and non-resource lands;*  
26

27 The majority of Umatilla County is composed of rural resource lands, and the area along the  
28 existing transmission line ROW in the vicinity of the McNary Substation is zoned for resource  
29 lands. The step-up substation site is located within the “Public Facility Plan” designation of the  
30 City of Umatilla Plan Map. The heavy concentration of utility services in the area, including the  
31 McNary Substation and various transmission facilities, limits the area’s potential for use as  
32 resource lands. The City of Umatilla lands crossed by the transmission corridor are zoned for  
33 residential or neighborhood commercial uses, and are less appropriate for substation  
34 development than the chosen site.  
35

36 *d. Availability of existing rights-of-way;*  
37

38 As explained in the ASC, the step-up substation would be sited in the existing transmission line  
39 ROW adjacent to the McNary Substation, minimizing the impact on productive agricultural land.  
40

41 *e. Public health and safety; and*  
42

1 The step-up substation would be located in an area already used for utility purposes, including  
2 power transmission. The impacts to public health and safety would be minimal, as no  
3 residential or other high-occupancy uses are located near the new substation.

4  
5 *f. Other requirements of state or federal agencies.*  
6

7 As provided throughout this final order, all applicable requirements of state or federal agencies  
8 must be satisfied at the time of construction of the facility.  
9

10 *(3) Costs associated with any of the factors listed in subsection (2) of this section may be*  
11 *considered, but cost alone may not be the only consideration in determining that a utility*  
12 *facility is necessary for public service. Land costs shall not be included when considering*  
13 *alternative locations for substantially similar utility facilities. The Land Conservation and*  
14 *Development Commission shall determine by rule how land costs may be considered*  
15 *when evaluating the siting of utility facilities that are not substantially similar.*  
16

17 The costs of developing the new step-up substation at the proposed location are anticipated to  
18 be significantly lower than any alternative alignment. However, the cost savings results from  
19 the proposed location being within an existing utility corridor, and from minimizing the need to  
20 construct new transmission towers and a lengthy and costly 550-kV line, not from the fact that  
21 the corridor is on land zoned EFU.  
22

23 *(4) The owner of a utility facility approved under ORS 215.213 (1)(c) or 215.283 (1)(c)*  
24 *shall be responsible for restoring, as nearly as possible, to its former condition any*  
25 *agricultural land and associated improvements that are damaged or otherwise disturbed*  
26 *by the siting, maintenance, repair or reconstruction of the facility. Nothing in this section*  
27 *shall prevent the owner of the utility facility from requiring a bond or other security from*  
28 *a contractor or otherwise imposing on a contractor the responsibility for restoration.*  
29

30 At the step-up substation, some lands would be permanently removed from potential  
31 agricultural production; however, any other disturbed agricultural lands would be restored and  
32 returned to agricultural production after construction activities are completed.  
33

34 *(5) The governing body of the county or its designee shall impose clear and objective*  
35 *conditions on an application for utility facility siting under ORS 215.213 (1)(c) or 215.283*  
36 *(1)(c) to mitigate and minimize the impacts of the proposed facility, if any, on*  
37 *surrounding lands devoted to farm use in order to prevent a significant change in*  
38 *accepted farm practices or a significant increase in the cost of farm practices on the*  
39 *surrounding farmlands.*  
40

41 As provided in the ASC, the construction of the step-up substation and underground line would  
42 not have long-term impacts on surrounding farmlands, cause a significant change in farm



practices, or affect the costs of inputs to the established agricultural practices. Approximately three acres of land used for farming would be occupied by the step-up substation and precluded from future farming use. The surrounding agricultural lands are tractor farmed row crops, and accepted farm practices include soil preparation, sowing, fertilizing, pest and weed management, and harvesting. Necessary inputs are assumed to be labor, fertilizer, electricity, and water. Adjacent farming practices have adapted to an area that includes a high concentration of power transmission towers and overhead lines. The development of the step-up substation and underground line would not change these accepted farm practices, or affect the availability or costs of the necessary inputs. Specifically, the step-up substation would not physically interfere with the ability to irrigate, fertilize, or harvest crops on surrounding fields. The physical improvements and operations of the step-up substation or underground line would not interfere with the ability to operate necessary farm equipment on surrounding lands, or to provide fertilizer, irrigation water, pesticides or other necessary crop inputs, and would not affect the costs of these inputs.

No center pivot irrigation or other systems would be impacted by the step-up substation. Farmlands disturbed during the construction of the underground line would be restored and returned to agricultural production. Future agricultural production would not be impacted by the presence of the underground line, which would be buried to a sufficient depth so as to avoid interference with agricultural practices.

The potential for a change of practices on lands adjacent to the step-up substation, such as from electrical impacts, potential for conflicts with aerial spraying, and potential for spread of invasive species due to construction, is very limited because the step-up substation is located in an existing ROW in an area with existing transmission infrastructure.

Based upon the above information, the Council finds that the step-up substation is a “utility facility necessary for public service” and, therefore, permitted in the EFU zone.

### **Section 3.014 DIMENSIONAL STANDARDS**

*In an F-1 Zone, the following dimensional standards shall apply:*

*(1) Minimum Lot Area: 19 acres for a principal dwelling unit.*

The 19-acre minimum lot size standard is inapplicable because there are no dwelling units associated with the transmission line or the step-up substation.

*(2) Setback: No building shall be located closer than 20 ft. from a property line abutting a street or road.*

1 The facility would comply with all setback requirements in the F-1 zone. No new transmission  
2 towers are proposed to be constructed in the F-1 zone, and any buildings associated with the  
3 step-up substation would be set back more than 20 feet from any property line abutting a  
4 street or road.

5  
6 *(3) Minimum Lot Area for Nonfarm Uses: As determined by the Department of*  
7 *Environmental Quality to be necessary for the protection of public health.*  
8

9 BPA owns the property on which the step-up substation and a portion of the underground line  
10 would be sited, and BLM owns the property on which the remainder of the underground line  
11 and the underground termination structure are to be located. Nonetheless, no new lots would  
12 be created so this provision does not apply.

### 13 14 **Section 3.016 SIGNS**

15  
16 *In an F-1 Zone, the following signs are permitted upon the issuance of a zoning permit: type*  
17 *2, 3, 4, 5, and 6.*  
18

19 All new signs would be limited to those required for public safety notice requirements. See  
20 condition E.4 above, which limits facility signage.

### 21 22 **B. General Rural Zone (F-2)**

### 23 24 **Section 3.020 DESCRIPTION AND PURPOSE**

25  
26 *The F-2 General Rural Zone is intended to apply to farmlands that would not be appropriate*  
27 *for an F-1 Exclusive Farm Use classification. It is designed to maintain the openness and rural*  
28 *nature of the country-side, and to provide areas which are appropriate for most kinds of*  
29 *typical rural development. It also allows the Planning Commission to attach special*  
30 *conditions to certain uses that have a potentially detrimental effect on neighboring lands.*  
31

32 The transmission line traverses F-2 zoned land located to the east of I-82 in an existing  
33 transmission line ROW. The transmission line would utilize existing transmission towers,  
34 thereby minimizing any potential impacts on the openness and rural natural of the country side.

### 35 36 **Section 3.024 CONDITIONAL USES**

37  
38 *In an F-2 Zone, the following uses and their accessory uses are permitted subject to the*  
39 *requirements of Section 7.010 through 7.040 inclusive and upon issuance of a zoning permit:*  
40

41 *(14) Utility facility;*  
42

1 **Section 1.090 DEFINITIONS**

2  
3 *(63) Utility Facility: Any major structure owned or operated by a public, private or*  
4 *cooperative electric, fuel, communication, sewage or water company for the generation,*  
5 *trans-mission, distribution or processing of its productions or for the disposal of cooling*  
6 *water, waste or by-products, and including power transmission lines, major trunk*  
7 *pipelines, power substations, dams, water towers, sewage lagoons, sanitary landfills and*  
8 *similar facilities, but excluding sewer, water, gas, telephone and power local distribution*  
9 *lines and similar minor facilities allowed in any zone.*

10  
11 Power transmission lines and substations are specifically defined as “utility facilities” and are  
12 allowed as a conditional use on F-2 zoned lands. Umatilla County’s *Response to Amended Notice*  
13 *of Intent* dated September 23, 2013, however, indicated that “[n]o land use permit is required  
14 to co-locate and upgrade the transmission line.” Nonetheless, as described below, the  
15 reconducted transmission line meets all conditional use requirements.

16  
17 **Section 3.026 DIMENSIONAL STANDARDS**

18  
19 *In an F-2 Zone, the following dimensional standards shall apply:*

- 20  
21 *(1) Minimum Lot Area: 19 acres for a principal dwelling unit.*  
22 *(2) Minimum Lot Area for All Other Uses: As determined by the Department of*  
23 *Environmental Quality to be necessary for the protection of public health;*  
24 *(3) Setback: No building shall be located closer than 20 feet from a property line abutting*  
25 *a street or road;*  
26 *(4) Conditional Uses: Additional dimensional standards may be required by the*  
27 *Planning Commission in approving a conditional use, as provided in Article 7.*

28  
29 The lot area requirements above are not applicable because no new lots or dwellings would be  
30 created in F-2 zoned lands. The setbacks are also inapplicable because no new buildings or  
31 transmission towers would be constructed in the F-2 zone.

32  
33 **C. Heavy Industrial Zone (M-2)**

34  
35 **Section 3.140 DESCRIPTION AND PURPOSE**

36  
37 *The M-2 Heavy Industrial Zone is designed to provide for industrial development where*  
38 *potential nuisances will have a minimum negative effect on adjacent property. It is*  
39 *appropriate for areas near major transportation facilities which are suitable for all types of*  
40 *industrial development.*

1 The transmission line crosses M-2 zoned lands, located entirely within the existing transmission  
2 corridor. The reconducted transmission line would not interfere with any existing industrial  
3 uses or pose a nuisance to adjacent uses.

#### 4 5 **Section 3.144 CONDITIONAL USES**

6  
7 *In an M-2 Zone the following uses and their accessory uses are permitted, subject to the*  
8 *requirements of Sections 7.010 through 7.040 inclusive and upon the issuance of a zoning*  
9 *permit:*

10  
11 *(13) Utility facility;*

12  
13 As discussed previously, power transmission lines are specifically defined as “utility  
14 facilities” and therefore are allowed as a conditional use on M-2 zoned lands; however,  
15 Umatilla County’s *Response to Amended Notice of Intent* dated September 23, 2013 indicated  
16 that “[n]o land use permit is required to co-locate and upgrade the transmission line.”  
17 Nonetheless, as described below, the reconducted transmission line would meet all  
18 conditional use requirements.

#### 19 20 **Section 3.146 DIMENSIONAL STANDARDS**

21  
22 *In an M-2 Zone the following dimensional standards shall apply:*

23  
24 *(1) Minimum Lot Area: As determined by the Department of Environmental Quality to be*  
25 *necessary for the protection of public health;*

26 *(2) Setback: No building shall be located closer than 30 feet from a lot line except by a*  
27 *ruling of the Planning Commission upon the request of a property owner;*

28 *(3) Conditional Uses: Additional dimensional standards may be required by the Planning*  
29 *Department in approving a conditional use as provided by Article 7.*

30  
31 The lot area requirements are inapplicable because no new lots or dwellings would be created  
32 in M-2 zoned lands. The setbacks are also inapplicable because no new buildings or  
33 transmission towers would be constructed in the M-2 zone because the transmission line will  
34 utilize existing transmission towers within the M-2 zone.

#### 35 36 **D. Agricultural Residential Zone (R-1)**

#### 37 38 **Section 3.070 DESCRIPTION AND PURPOSE**

39  
40 *The R-1 Agricultural-Residential Zone is designed to provide for very low density residential*

development along with a continuation of farm uses. Acreage tracts are required because utilities will not be available in the foreseeable future. Conflicting business and industrial uses are excluded.

The existing transmission line crosses a small stretch of R-1 zoned land, including the Umatilla River and lands immediately adjacent to the river. However, there are currently no transmission towers in the R-1 zone; the necessary towers are located in the immediately adjacent zones. The reconducted line would cross lands zoned R-1; however, the existing tower already in existence in the immediately adjacent zones would continue to serve the reconducted line so no existing or new transmission towers would be located on the R-1 zoned lands.

### **Section 3.072 CONDITIONAL USES**

*In an R-1 Zone the following uses and their accessory uses are permitted, subject to the requirements of Sections 7.010 through 7.040 inclusive, and upon the issuance of a zoning permit.*

#### *(6) Utility facility;*

As discussed previously, power transmission lines are specifically defined as “utility facilities” and are therefore allowed as a conditional use on R-1 zoned lands; however, Umatilla County’s *Response to Amended Notice of Intent* dated September 23, 2013, indicated that “[n]o land use permit is required to co-locate and upgrade the transmission line.” As described below, the reconducted transmission line would meet all conditional use requirements. UCDC §§ 7.030 and 7.035 address time limits for initiating construction and re-filing conditional use permit applications. These are not substantive standards or procedures related to the approval of a Conditional Use Permit and, therefore, are not applicable to this review.

### **Section 3.073 DIMENSIONAL STANDARDS**

*In an R-1 Zone, the following dimensional standards shall apply:*

- (1) Minimum Lot Area for Residential Use: 4 acres;*
- (2) Minimum Lot Area for Nonresidential Use: As determined by the Department of Environmental Quality to be necessary for the protection of public health;*
- (3) Setback: No building shall be located closer than 20 ft. from a lot line.*

The lot area requirements are not applicable because no new lots or dwellings would be constructed in R-1 zoned lands. The setbacks are also inapplicable because no new buildings or transmission towers would be constructed in the R-1 zone.

## **E. Article 7, Conditional Uses**

1  
2 **Section 7.010 REGARDING CONDITIONAL USES**

3  
4 *Conditional uses listed in this ordinance may be permitted, enlarged, or altered upon*  
5 *authorization by the Hearings Officer in accordance with the standards and procedures set*  
6 *forth in Sections 7.010 through 7.040 inclusive.*  
7

8 Under ORS 469.504(1)(b), the Council must determine the facility's compliance with the  
9 applicable approval standards for a conditional use. As noted above and described below, the  
10 reconducted transmission line meets all conditional use requirements. UCDC §§ 7.030 and  
11 7.035 address time limits for initiating construction and re-filing conditional use permit  
12 applications. These are no substantive standards or procedures related to the approval of a  
13 Conditional Use Permit, and therefore, UCDC time limits are not applicable to this review.  
14

15 **Section 7.020 PROCEDURE FOR TAKING ACTION ON A CONDITIONAL USE**  
16 **APPLICATION**

17  
18 *The procedure for taking action on a conditional use application shall be as follows:*  
19

20 *(1) A property owner or the Planning Commission may initiate a request for a conditional*  
21 *use by filing an application with the secretary of the Planning Commission, using forms*  
22 *prescribed pursuant to Section 10.030.*  
23

24 Because the applicant has selected "Path B" under ORS 469.504(1)(b), upon approval of the  
25 ASC, pursuant to ORS 469.401(3), the county must issue the approved permits, upon  
26 submission by the certificate holder of the proper application form and payment of fees,  
27 without hearing or other proceedings.  
28

29 *(2) Within 60 days of receipt of the application, the Hearings Officer of the county shall*  
30 *hold a hearing and take action thereon. Applicant shall be given written notice of the*  
31 *decision by the Planning Director or the secretary of the Planning Commission within five*  
32 *days of the decision,*  
33

34 These procedures do not apply, because the applicant has elected a "Path B" determination by  
35 the Council. Pursuant to ORS 469.401(3), after issuance of a site certificate, the affected county  
36 must promptly issue the permits addressed in the site certificate, upon submission of the  
37 applicant of the proper application and fees, but without hearings or other proceedings.  
38

39 *(3) A Conditional Use Permit shall not be approved unless the proposed use of the land*  
40 *would be in compliance with the Umatilla County Comprehensive Plan.*  
41

1 Compliance with the applicable policies of the Umatilla County Comprehensive Plan are  
2 discussed above.

3  
4 *(4) An applicant granted a conditional use permit must also obtain a zoning permit*  
5 *before commencing construction.*

6  
7 As discussed above, the applicant would obtain a zoning permit for each tax lot where new  
8 construction occurs.

9  
10 **Section 7.040 SUGGESTED STANDARDS GOVERNING CONDITIONAL USES**

11  
12 *In addition to the standards of the zone in which the conditional use is located and the*  
13 *general standards of this ordinance, the Hearings Officer shall consider the following*  
14 *additional requirements:*

15  
16 *(1) Conditional uses, generally:*

17  
18 *(a) Yards: In an F-2, F-4, F-5, R-2, R-3 and R-4 Zone, yards may be at least two-thirds*  
19 *the height of the principal structure. In any zone additional yard requirements may*  
20 *be imposed.*

21  
22 The proposed transmission line crosses F-2 zoned lands, but these provisions are inapplicable  
23 because no new structures would be constructed within the F-2 zone.

24  
25 *(b) Limitations on access to property and on openings to buildings:*

26  
27 *(14) Radio, television tower, utility station, or substation:*

28  
29  
30 *(a) In a residential zone, all equipment storage on the site may be within an enclosed*  
31 *building;*

32  
33 The small portion of R-1 zoned lands crossed by the transmission line are either located in the  
34 Umatilla River or within the ROW of I-82. However, the applicant is not proposing to store any  
35 equipment in this zone.

36  
37 *(b) The use may be fenced and provided with landscaping;*

38  
39 Security fencing would be provided around the step-up substation, but as explained in the ASC,  
40 landscaping would be inappropriate because the area around the substation site is unoccupied  
41 except for other utility facilities, including transmission towers and the McNary Substation.

1                   (c) The minimum lot size for a public utility facility may be waived on finding that the  
2                   waiver will not result in noise or other detrimental effect to adjacent property;  
3

4       As stated in the ASC, no new lots would be created, therefore, this provision is not applicable.  
5       Nonetheless, the lot of the step-up substation is 23.99 acres, which would provide adequate  
6       buffering to protect the public health from the noise associated with the step-up substation.  
7       Further there are no dwelling within 1,500 feet of the step-up substation site.  
8

9                   (d) Transmission towers, poles, overhead wires, pumping stations, and similar gear  
10                  hall be so located, designed, and installed as to minimize their conflict with scenic  
11                  values,  
12

13       The majority of the transmission line would be located within an existing ROW and would utilize  
14       the existing transmission towers, thereby preventing any additional impacts on scenic values  
15       due to the construction of the proposed facility. A new connecting structure and step-up  
16       substation would be constructed in the vicinity of the McNary Substation, along with an  
17       underground line. However, as stated in the ASC, the step-up substation's location near the  
18       McNary Substation in an area with existing transmission facilities, which minimizes the impact  
19       from that facility on scenic resources. The applicant provided additional information regarding  
20       the facility's impact on scenic resources in Exhibit R of the ASC, which is addressed below under  
21       the Council's Scenic Resource Standard.  
22

## 23       **F. City of Umatilla Zoning** 24

25       The transmission line currently crosses City of Umatilla lands zoned Neighborhood Commercial  
26       (NC), Single Family Residential (R1), and Multi-Family Residential (R2). The transmission line is  
27       permitted as a "Community Service" use, which is a conditional use in each of these zones.  
28

### 29       **Neighborhood Commercial (NC)** 30

31               10-4A-3: CONDITIONAL USES PERMITTED:

32               Community Services uses as provided by Chapter 6 of this Title.  
33

### 34       **Residential, Single Family (R1)** 35

36               10-3A-3: CONDITIONAL USES PERMITTED:

37               The following primary uses and their accessory uses may be permitted when authorized in  
38               accordance with the requirements of Chapter 12 of this Title:  
39

40               Community Services uses as provided by Chapter 6 of this Title.  
41

### 42       **Residential, Multi-Family (R2)**



1  
2 **10-3B-3: CONDITIONAL USES PERMITTED:**

3 *The following uses and their accessory uses may be permitted subject to the provisions of*  
4 *Chapter 12 of this Title:*

5  
6 *Community Services uses as provided by Chapter 6 of this Title.*

7  
8 **Community Service (CS)**

9  
10 **10-6-1: COMMUNITY SERVICES USES:**

11  
12 *The purpose of this Chapter is to provide a procedure and standards for the review of special*  
13 *uses which, by reason of their public convenience, necessity, unusual character, technical*  
14 *need or effect on the neighborhood, may be appropriate in any district but not suitable for*  
15 *listing within the other sections of this Title. The following uses may be approved as*  
16 *Community Services uses:*

17  
18 *Utility facility, including generating facilities, substations, telephone switching stations, and*  
19 *other facilities required for the transmission of power or communications.*

20  
21 The proposed reconducted transmission line is required for the transmission of power and is  
22 a "utility facility." As a utility facility, the transmission line may be approved as a Community  
23 Service use.

24  
25 **10-6-2: PROCEDURE:**

26  
27 *Community Services uses shall be considered a Type III review process.*

28  
29 *(A) Application: All Community Services uses shall be reviewed as conditional uses according*  
30 *to the procedures and criteria of Chapters 12 and 14 of this Title. Plans shall be submitted*  
31 *for the site that identify the location of the use, building, parking area, landscaping,*  
32 *screening, and any other features on the site. The applicant shall submit a narrative that*  
33 *explains why the use is necessary for the community and why the particular site best serves*  
34 *the community. The narrative shall also consider impacts upon surrounding uses and*  
35 *possible mitigating measures, including, but not limited to, the location of parking, effects of*  
36 *off-site parking, traffic generation, street access points, buffering and screening, noise,*  
37 *illumination controls, structure height, hours of operation, crime prevention, design*  
38 *elements such as scale, structural design, form and materials, signage, and any other*  
39 *impacts unique to the specific use.*

40  
41 *The approval of a Community Services use is for a specific use. Any change or expansion of*  
42 *an approved use shall be subject to the review procedures of this Chapter.*

As explained in the ASC, the applicant is proposing to utilize the existing transmission line infrastructure within the City of Umatilla. No parking would be required for the transmission line because access to the transmission line would only be required for temporary and intermittent maintenance activities. Given the linear nature of the transmission line located entirely within an existing ROW, and the use of existing transmission towers, no visual impact would result from the proposed facility's use of the existing towers and upgrade of the line that would require mitigation through landscaping or screening. As provided in the ASC, there is no feasible route to transmit power from the energy facility site to the McNary Substation without crossing the City of Umatilla. Utilization of the existing ROW and existing transmission towers within the City limits would, however, minimize the impact of the transmission line and, therefore, best serves community interests. By utilizing the existing ROW and towers, the transmission line would not pose any additional visual, noise, traffic, parking, access, or lighting impacts on the community. No new structures would be constructed and any signage required would be limited to that required for public safety notification.

#### **10-12-1: AUTHORIZATION TO GRANT OR DENY**

*A conditional use listed in this Title, may be permitted, denied, enlarged or altered upon authorization of the Planning Commission in accordance with the criteria and standards of this Chapter and Type III procedures in Chapter 14 of this Title. Site review is required for conditional uses.*

*(A) Approval Criteria: The applicant shall carry the burden of proof in demonstrating that the following review criteria are satisfied, in addition to any specific criteria and standards in this Chapter, other applicable chapters of this Title, and this Code. If any of the following criteria and other applicable standards cannot be satisfied by requiring conditions with the approval, the use shall be denied:*

*(1) Applicable Plans: The conditional use application complies with applicable policies of the Umatilla City Comprehensive Plan. Compliance with the Umatilla City Comprehensive Plan is discussed below.*

*(2) Code Provisions: The proposal complies with all applicable provisions of this Code, including, but not limited to, provisions of this Chapter, the base district, and site review, as well as any other applicable provisions of this Code.*

The transmission line would comply with all applicable provisions of the Umatilla City Code and is permitted as a conditional use in the R1, R2, and NC zones.

1           *(3) Use Characteristics: If the proposed use is a community service, application shall*  
2           *include evidence to demonstrate that the proposed use is needed within the community*  
3           *to provide a social or technical benefit.*

4  
5       The existing transmission line ROW passes through the City of Umatilla. Use of this ROW and  
6       existing transmission towers eliminates or mitigates all impacts of the transmission line to the  
7       local community. As discussed above, the transmission line is a utility facility defined as a  
8       Community Service Use in the Umatilla City Code.

9  
10           *(4) Site Characteristics: The site is appropriate for the proposed use, considering, but not*  
11           *limited to, the following factors: neighboring land use, adequacy of transportation*  
12           *facilities and access, site size and configuration, adequacy of public facilities.*

13  
14       The length of the proposed reconducted transmission line through the City of Umatilla would  
15       be located within the existing right of way and would utilize the existing transmission towers.  
16       As explained in the ASC, a portion of the R1 and R2 zones currently crossed by the transmission  
17       line is developed with single family homes. However, all dwellings are set back from the existing  
18       transmission corridor along Powerline Road. The NC zoned property crossed by the  
19       transmission line is undeveloped. Nonetheless, existing or potential future neighboring lands in  
20       any zone would not be affected by the reconducted transmission line because the  
21       reconducted line does not require new towers and the new line would have no different  
22       impact than the transmission lines currently in place, which would not result in additional  
23       transportation impacts.

24  
25           *(5) Impacts On The Neighborhood: Potential impacts on neighboring properties shall be*  
26           *identified. Mitigating measures shall be identified for unavoidable adverse impacts*

27  
28       The entire length of the transmission line through the City of Umatilla would be located within  
29       an existing ROW and would utilize existing transmission towers, which prevents any additional  
30       long term impact on neighboring properties. Reconducting activities would be conducted  
31       within the ROW and the reconducted transmission line would comply with all Council  
32       standards for transmission lines, including the provisions of OAR 345-024-0090, which require  
33       alternating current electric fields not to exceed 9 kV per meter at 1 meter above the ground  
34       surface in areas accessible to the public, and induced currents to be as low as reasonably  
35       achievable. Compliance with OAR 345-024-0090 is discussed in more detail below.

36  
37           *(6) Impacts On The Community: Potential impacts on the community shall be identified,*  
38           *including, but not limited to, public facilities, land supply within the particular zoning*  
39           *district, impact on housing, etc. Potential benefits of a proposed use may outweigh*  
40           *potential impacts, but such benefits and impacts should be identified. Unavoidable*  
41           *adverse impacts should be mitigated to the extent possible.*

1 The entire length of the transmission line through the City of Umatilla is proposed to be located  
2 within the existing transmission line ROW and would utilize the existing transmission towers,  
3 preventing any additional impacts on the community. The supply of land within the R1, R2, and  
4 RC zones would not be affected by the transmission line because no new transmission towers  
5 would be constructed, nor would the transmission ROW be expanded within the limits of the  
6 City of Umatilla.

7  
8 *(B) Conditions Of Approval: Conditions of approval for mitigating measures shall be clearly*  
9 *related to the identified impact or impacts. If complex conditions of approval are considered*  
10 *necessary, this is an indication that the proposed use may not be appropriate for the*  
11 *proposed site. Conditions of approval may include, but are not limited to, the following:*

12  
13 *(1) Increasing the required lot size or yard dimension.*

14  
15 This provision is inapplicable because no additional transmission towers would be constructed  
16 within the City of Umatilla, and no new lots would be created.

17  
18 *(2) Limiting the height, size, or location of the building or use*

19  
20 This provision is not applicable because no new buildings would be constructed as part of the  
21 transmission line and the transmission line would utilize the existing transmission towers within  
22 the limits of the City.

23  
24 *(3) Controlling the location and number of vehicle access points.*

25  
26 No new vehicle access points would be required because the transmission line would be  
27 located entirely within the existing right of way and would utilize the existing transmission  
28 towers.

29  
30 *(4) Increasing the street width and requiring street improvements.*

31  
32 No transportation impacts are anticipated that would require street improvements because the  
33 transmission line would be located entirely within an existing ROW and would utilize existing  
34 transmission towers within the limits of the City of Umatilla.

35  
36 *(5) Increasing or decreasing the number of required off-street parking spaces.*

37  
38 The transmission line would be located entirely within an existing ROW, would utilize existing  
39 transmission towers within the limits of the City of Umatilla, and would not require or affect off-  
40 street parking. As explained in the ASC, no off-street parking spaces are required because the  
41 transmission line requires only temporary and intermittent maintenance activities along a

lengthy linear infrastructure facility, and sufficient parking area is available within the ROW to satisfy these temporary needs.<sup>132</sup>

*(6) Limiting the number, size, location, and lighting of signs.*

Because the transmission line would be located entirely within an existing ROW and utilize existing transmission towers within the limits of the City of Umatilla, signage would be limited to that necessary to meet required public safety notice requirements.

*(7) Requiring diking, fencing, screening, landscaping, or other facilities designed to protect adjacent or nearby properties.*

The newly reconducted transmission line would be located within an existing ROW and utilize existing transmission towers within the limits of the City of Umatilla. Thus, the reconducted transmission line would have no visual impact distinguishable from current conditions, and no diking, fencing, screening, or landscaping is required.

*(8) Designating sites for open space.*

The newly reconducted transmission line would have no long-term impact on open space. No new open space needs to be designated because the transmission line would be located within an existing ROW and utilize existing transmission towers within the limits of the City of Umatilla.

*(C) Existing Conditional Use: Any conditional use existing prior to the effective date of this Title, and classified in this Title as a conditional use, shall not be changed with respect to the use, site, or structure, unless the change conforms with the current requirements for conditional use.*

The reconducted transmission line would not change the use, site, or structure of any existing conditional uses because it would be located within an existing ROW and utilize existing transmission towers within the limits of the City of Umatilla.

**10-12-2: STANDARDS GOVERNING CONDITIONAL USES**

*In addition to the standards of the district in which the conditional use is located and the other standards of this Title, the following criteria and standards shall apply to the specifically identified conditional use:*

---

<sup>132</sup> ASC, Exhibit K, K-98.

1 *(D) Utilities, Storage Tanks, And Towers For Transmission Of Radio Waves For Cellular*  
2 *Communications And Similar Facilities: The Planning Commission shall determine that the*  
3 *proposed site is located to best serve the intended area and that impacts on surrounding*  
4 *properties and appropriate mitigating measures are identified. Such facilities shall be*  
5 *located, designed, and installed with regard for aesthetic values.*  
6

7 As explained in the ASC, the transmission line location was selected to maximize use of the  
8 existing ROW and transmission towers and to reduce the need for construction of new  
9 transmission tower facilities.<sup>133</sup> There would be no additional impact on aesthetic values within  
10 the R1, R2, or NC zones because no new transmission towers are to be constructed within the  
11 limits of the City of Umatilla and the line would not be visually distinct from the existing line.  
12

### 13 **G. City of Umatilla Comprehensive Plan**

#### 14 **City of Umatilla Comprehensive Plan**

##### 15 **SECTION 1.0 CITIZEN INVOLVEMENT GOAL**

16  
17 *To promote a program that facilitates the flow of information and ideas between the City*  
18 *and its residents and insures the opportunity for citizen involvement in the planning process.*  
19  
20

21 The Council's review of an ASC is a public process that allows and provides opportunities for the  
22 public to submit comment and participate. On April 14, 2015, the department issued a public  
23 notice of the Draft Proposed Order to the Council's general mailing list and to adjacent property  
24 owners and published notice of the Draft Proposed Order in the East Oregonian, a newspaper  
25 of general circulation in the area of the facility. The public notice and newspaper notice  
26 contained an announcement of a public hearing, which the department held on May 14, 2015  
27 in Hermiston, Oregon. The comment deadline and close of the public record on the Draft  
28 Proposed Order was May 14, following completion of the public hearing. Following issuance of  
29 the Proposed Order, persons who commented on the Draft Proposed Order had an opportunity  
30 to request party status in the contested case. However, no requests for party status in this  
31 contested case proceeding were received by the deadline.  
32

##### 33 **SECTION 2.0 LAND USE PLANNING GOAL**

34 *To provide a process and basis for decisions and actions related to the existing and future*  
35 *use of the land, and insure the orderly development of the City of Umatilla.*  
36

37 The Council's site certificate application process provides a process and basis for decisions and  
38 actions related to land use.  
39

##### 40 **SECTION 3.0 AGRICULTURAL LANDS GOAL**

---

<sup>133</sup> ASC, Exhibit K, K-99.-

1       *To maintain agricultural lands consistent with the need for agricultural products.*

2  
3       The transmission line does not cross any agricultural lands within the City of  
4       Umatilla.

5  
6       *SECTION 5.0 NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES GOAL*  
7       *To protect and enhance through proper use and development the open spaces, scenic and*  
8       *historic areas, and natural resources of the area.*

9  
10       The use of the existing transmission line ROW and transmission towers would necessarily avoid  
11       any new impact on open spaces, scenic and historic areas, and the natural resources of the area  
12       because no new construction would be required.

13  
14       *SECTION 6.0 AIR, WATER AND LAND RESOURCES QUALITY GOAL*  
15       *To maintain and improve the quality of the air, water, and land in the Umatilla area.*

16  
17       The use of the existing transmission line ROW and transmission towers would minimize any  
18       impact on the air, water, and land in the Umatilla area.

19  
20       *SECTION 7.0 AREAS SUBJECT TO NATURAL DISASTERS AND HAZARDS GOAL*  
21       *To protect life and property from natural disasters and hazards.*

22  
23       The use of the existing transmission line ROW and transmission towers would minimize any  
24       increased risk to life or property from natural disasters and hazards.

25  
26       *SECTION 8.0 RECREATIONAL NEEDS GOAL*  
27       *To provide programs and facilities to meet the recreational needs of area residents and*  
28       *visitors.*

29  
30       The use of the existing transmission line ROW and transmission towers would avoid any new  
31       impact on the recreational opportunities for residents and visitors to the City of Umatilla.

32  
33       *SECTION 9.0 ECONOMIC DEVELOPMENT GOAL*  
34       *To provide for the economic diversification and stability of the area.*

35  
36       As stated in the ASC, reconductoring the transmission line would provide temporary  
37       construction jobs within the City of Umatilla.

38  
39       *SECTION 10.0 HOUSING GOAL*  
40       *To increase the supply of housing commensurate with population growth, and the peoples'*  
41       *needs.*

1 The use of the existing transmission line ROW and transmission towers would minimize the  
2 impact of construction and therefore would minimize the necessary temporary housing supply  
3 impact on the City of Umatilla.

4  
5 *SECTION 11.0 PUBLIC FACILITIES AND SERVICES GOAL*

6 *To coordinate and arrange for the provision of public facilities and services in an efficient,*  
7 *orderly, and timely manner.*

8  
9 The use of the existing transmission line ROW and transmission towers would minimize any  
10 impact on the public facilities and services in the City of Umatilla.

11  
12 *SECTION 12.0 TRANSPORTATION GOAL*

13 *To develop and encourage a safe, convenient and economic transportation system.*

14  
15 According to the ASC, the development of the Project would have minor traffic impacts in the  
16 City of Umatilla during construction, and would have no permanent impacts on the City's  
17 transportation system. The construction of the Energy Facility Site and the step-up substation  
18 would occur outside the city limits and are not expected to have measurable traffic impacts  
19 within the City of Umatilla. The applicant anticipates that the reconductoring of the  
20 transmission line within the city limits may have minor, temporary impacts on traffic in the  
21 immediate vicinity of reconductoring operations, however, there would be no long-term  
22 impacts on traffic in the City of Umatilla.

23  
24 *SECTION 13.0 ENERGY CONSERVATION GOAL*

25 *To conserve energy.*

26  
27 As stated in the ASC, the development of the transmission line is essential to the development  
28 of the Station, which would provide load balancing for variable wind generated electricity,  
29 supporting the electric power grid and encouraging further renewables development in the  
30 area.<sup>134</sup>

31  
32 *SECTION 14.0 URBANIZATION GOAL*

33 *To provide for an orderly and efficient transition from rural to urban land use.*

34  
35 By using the existing power corridor and transmission towers, the project would avoid any  
36 impact on the rate of urbanization in the City of Umatilla.

37  
38 Based on the foregoing analysis, the Council finds that the portion of the facility located in the  
39 City of Umatilla satisfies all applicable code and comprehensive plan requirements.

40  

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<sup>134</sup> ASC, Exhibit K, K-101.



## H. Federal Land Management Plans

*OAR 345-021-0010(1)(k)(D) If the proposed facility will be located on federal land:*

*(i) Identify the applicable land management plan adopted by the federal agency with jurisdiction over the federal land.*

*(ii) Explain any differences between state or local land use requirements and federal land management requirements;*

*(iii) Describe how the proposed facility complies with the applicable federal land management plan;*

*(iv) Describe any federal land use approvals required for the proposed facility and the status of application for each required federal land use approval;*

*(v) Provide an estimate of time for issuance of federal land use approvals; and*

*(vi) If federal law or the land management plan conflicts with any applicable state or local land use requirements, explain the differences in the conflicting requirements, state whether the applicant requests Council waiver of the land use standard described under OAR 345-021-0010(1)(k)(B) and (C) of this subsection and explain the basis for the waiver.*

The proposed step-up substation and a portion of both the transmission line and underground line would be located on property controlled by the Bonneville Power Administration (BPA). The remainder of the underground line and the underground termination structure would be located on property owned by the Bureau of Land Management (BLM) and controlled by the U.S. Army Corps of Engineers (Corps). However, neither the BPA, BLM nor the Corps have a federal land management plan that would be applicable to the project. Therefore, the Council finds that the facility complies with OAR 345-021-0010(1)(k)(D).

### IV.E.2. Land Use: Conclusions of Law

Based on the foregoing findings and the evidence in the record, the Council finds that the facility complies with each of the applicable substantive criteria identified by the local SAGs and, therefore, complies with the Council's Land Use Standard.

### IV.F. Protected Areas [OAR 345-022-0040]

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

1  
2 *(a) National parks, including but not limited to Crater Lake National Park and Fort*  
3 *Clatsop National Memorial;*

4  
5 *(b) National monuments, including but not limited to John Day Fossil Bed National*  
6 *Monument, Newberry National Volcanic Monument and Oregon Caves National*  
7 *Monument;*

8  
9 *(c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et*  
10 *seq. and areas recommended for designation as wilderness areas pursuant to 43*  
11 *U.S.C. 1782;*

12  
13 *(d) National and state wildlife refuges, including but not limited to Ankeny, Bandon*  
14 *Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart*  
15 *Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath,*  
16 *Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper*  
17 *Klamath, and William L. Finley;*

18  
19 *(e) National coordination areas, including but not limited to Government Island,*  
20 *Ochoco and Summer Lake;*

21  
22 *(f) National and state fish hatcheries, including but not limited to Eagle Creek and*  
23 *Warm Springs;*

24  
25 *(g) National recreation and scenic areas, including but not limited to Oregon Dunes*  
26 *National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon*  
27 *Cascades Recreation Area, and Columbia River Gorge National Scenic Area;*

28  
29 *(h) State parks and waysides as listed by the Oregon Department of Parks and*  
30 *Recreation and the Willamette River Greenway;*

31  
32 *(i) State natural heritage areas listed in the Oregon Register of Natural Heritage*  
33 *Areas pursuant to ORS 273.581;*

34  
35 *(j) State estuarine sanctuaries, including but not limited to South Slough Estuarine*  
36 *Sanctuary, OAR Chapter 142;*

37  
38 *(k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers*  
39 *designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed*  
40 *as potentials for designation;*

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

4  
5           *(m) Agricultural experimental stations established by the College of Agriculture,*  
6           *Oregon State University, including but not limited to:*

7  
8                     *Coastal Oregon Marine Experiment Station, Astoria*  
9                     *Mid-Columbia Agriculture Research and Extension Center, Hood River*  
10                    *Agriculture Research and Extension Center, Hermiston*  
11                    *Columbia Basin Agriculture Research Center, Pendleton*  
12                    *Columbia Basin Agriculture Research Center, Moro*  
13                    *North Willamette Research and Extension Center, Aurora*  
14                    *East Oregon Agriculture Research Center, Union*  
15                    *Malheur Experiment Station, Ontario*  
16                    *Eastern Oregon Agriculture Research Center, Burns*  
17                    *Eastern Oregon Agriculture Research Center, Squaw Butte*  
18                    *Central Oregon Experiment Station, Madras*  
19                    *Central Oregon Experiment Station, Powell Butte*  
20                    *Central Oregon Experiment Station, Redmond*  
21                    *Central Station, Corvallis*  
22                    *Coastal Oregon Marine Experiment Station, Newport*  
23                    *Southern Oregon Experiment Station, Medford*  
24                    *Klamath Experiment Station, Klamath Falls;*

25  
26           *(n) Research forests established by the College of Forestry, Oregon State University,*  
27           *including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett*  
28           *Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the*  
29           *Marchel Tract;*

30  
31           *(o) Bureau of Land Management areas of critical environmental concern,*  
32           *outstanding natural areas and research natural areas;*

33  
34           *(p) State wildlife areas and management areas identified in OAR chapter 635,*  
35           *Division 8.*

36           \* \* \*

37           IV.F.1. Protected Areas: Findings of Fact

38  
39           The Protected Areas standard requires the Council to find that, taking into account mitigation,  
40           the design, construction and operation of the facility are not likely to result in significant  
41           adverse impacts to any protected area as defined by OAR 345-022-0040. OAR 345-022-0040(3)  
42           provides that subsection (1) does not apply to transmission lines or natural gas pipeline routes

within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 pounds per square inch gage. The proposed facility's transmission line and natural gas pipeline are each to be located within existing utility rights-of-way and, consequently, are therefore not subject to the provisions of OAR 345-022-0040(1).

As established in the project order, the analysis area for protected areas is the area within the site boundary and 20 miles from the site boundary. However, because the transmission line and natural gas pipeline fall under the subsection (3) and are therefore not subject to subsection (1), the facility features included in the analysis area and as part of the site boundary for purposes of the protected areas standard are the energy facility site and the step-up substation.

The ASC addresses impacts to protected areas in Exhibit L of the ASC. Table F-1 below shows the identified protected areas within the analysis area, as presented in the ASC.

**Table F-1 Distance of Protected Areas from the Energy Facility Site and Step-up Substation**

<b>Protected Area<sup>1</sup></b>	<b>Distance (miles) and Direction from the Energy Facility Site</b>	<b>Distance (miles) and Direction from the Step-up Substation</b>
<b>(d) National and state wildlife refuges</b>		
Umatilla National Wildlife Refuge	9.43 NW	7.9 W
Cold Springs National Wildlife Refuge	9.57 NE	7.58 SW
McNary National Wildlife Refuge	14.26 NW	9.3 E
<b>(f) National and state fish hatcheries</b>		
Irrigon Hatchery	11.33 NW	11.14 SW
Umatilla Hatchery	11.64 NW	11.38 W
<b>(h) State parks and waysides</b>		
Hat Rock State Park	11.9 NE	6.54 E
<b>(m) Agriculture experimental stations</b>		
Hermiston Agriculture Research and Extension Center	4.01 NE	7.43 SE
<b>(o) Bureau of Land Management Areas Of Critical Environmental Concern</b>		
Oregon Trail Area of Critical Environmental Concern	5.85 SE	13.57 SE
<b>(p) State wildlife areas and managements areas</b>		
Coyote Springs Wildlife Area	12.9 NW	16.32 SW
Irrigon Wildlife Area	7.6 N	1.98 SW
Power City Wildlife Area	7.01 NE	1.58 SE

**Table F-1 Distance of Protected Areas from the Energy Facility Site and Step-up Substation**

Protected Area <sup>1</sup>	Distance (miles) and Direction from the Energy Facility Site	Distance (miles) and Direction from the Step-up Substation
<b>Note:</b> 1. There are no protected areas meeting the following criteria under OAR 345-022-0040(1): (a), (b), (c), (e), (g), (i), (j), (k), (l), and (n).		

As demonstrated in the table, the majority of the listed protected areas are located at least 4 miles from the energy facility and step-up substation. The detailed impacts from facility noise, traffic, water use and wastewater disposal, as well as visual impacts from project related structures and air emissions, are discussed below.

#### A. Noise

In Exhibit X the applicant provided information about predicted noise levels resulting from construction and operation of the facility. Because the protected areas closest to the proposed facility site are not designated “quiet areas” or otherwise identified as “noise sensitive receptors,” the DEQ noise regulations at OAR Chapter 340, Division 35 are not applicable. However, while the noise regulations are not applicable to the protection of protected areas, the evidence regarding noise provided by the applicant regarding in Exhibit X is relevant in considering the facility’s potential impacts on the protected areas.

The closest protected area to the Station is the Hermiston Agriculture Research and Extension Center, which is 4.01 miles northeast of the proposed facility. The nearest protected area to the step-up substation is the Power City Wildlife Area, which is 1.58 miles to the southeast. For context and reference, at a distance of 2,970 feet from the Station and 958 feet from the step-up substation site, noise levels would not exceed 50 dBA and the noise level contributions from operation of the Station and step-up substation would not be more than 10 A-weighted decibels above the lowest hourly average measured L50 dBA. As explained in the ASC as a point of comparison, light auto traffic (50 feet away) has a decibel level of 50 dBA.<sup>135</sup>

During construction of the Station, at 3,000 feet away from the center of the site the estimated construction noise would be approximately 54.4 dBA. During construction of the step-up substation, the estimated noise level is estimated to be 63.9 dBA at 958 feet away. For reference, as provided in the application, an air conditioning unit 20 feet away has a decibel level of 60 dBA. Based upon the distance of the protected areas from the station and the step-up substation and because operational noise levels associated with the noise levels would be below 50 dBA, the Council finds that operational noise of the facility will not result in a significant adverse impact to any protected area.

<sup>135</sup> ASC, Exhibit X, Attachment A.

Further, while construction noise levels attributable to the Station and step-up substation could measure above 50 dBA as evidenced with the identified measurement points, the Council finds that construction noise will not result in a significant adverse impact to the identified protected areas because the identified protected areas are located further from the facility than the identified measure points. Since the noise decibel level will be even lower at the identified protected areas, this further supports the conclusion that the construction noise will not result in a significant adverse impact to the protected areas. Additionally, the construction noise will be temporary, and noise at the worst levels identified will occur even less frequently.

#### B. *Traffic*

As explained in the ASC, the primary roads to provide access to the Station site during construction and operations would be Interstate 84, Interstate 82, Westland Road and Lamb Road. At the expected peak of construction, the Station would generate approximately 196 total trips during morning and afternoon peak traffic hour, while operation of the Station would generate only eight total trips during morning peak hours and 12 total trips during afternoon peak traffic hours.<sup>136</sup> The ASC explains that the primary road providing access to the step-up substation would be U.S. Route 730; however, the construction effort necessary for the step-up substation would be substantially less than that required at the Station site and no full-time employees would be located that the step-up substation site.

The roads immediately adjacent to or near protected areas in the analysis area include:

- US Route 730—immediately adjacent to McNary Wildlife Refuge, Hat Rock State Park, and Irrigon Wildlife Area; 1.9 miles southwest of Irrigon Hatchery, 0.65 miles southwest of Umatilla National Wildlife Refuge
- US Route 395—immediately adjacent to Power City Wildlife Area
- Interstate 84—immediately adjacent to Coyote Springs Wildlife Area
- Interstate 82—1.2 miles east of Irrigon Wildlife Area; and
- Washington State Route 14—immediately adjacent to Umatilla National Wildlife Refuge

Traffic generated during construction and operation of the project would be concentrated at the intersections of Interstate 82 and 84, Westland Road and Lamb Road. Beyond the vicinity of the site boundary, traffic would become dispersed and different routes utilized; however, even assuming all peak construction traffic (196 additional vehicle trips) drove the same route

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<sup>136</sup> ASC, Exhibit L, L-5.

adjacent to a protected area, the impact would still be minimal and insignificant based upon the evidence provided by the applicant. According to the latest Oregon Department of Transportation and Washington State Department of Transportation data on Average Annual Daily Traffic, worst case project related traffic would constitute the following impacts:

- Interstate 82—would see an increase of 1.1%
- Interstate 84—would see an increase of 1.1%
- U.S. Route 730—would see an increase of 2%
- U.S. 395—would see an increase of 0.9%
- Washington State Route 14—would see an increase of 4.2%

Based upon the minimal impacts resulting from the worst-case scenario of project related traffic, the Council finds that the expected increase in daily traffic resulting from the construction and operation of the facility is unlikely to result in a significant adverse impact to any protected areas.

#### *C. Water Use and Wastewater Disposal*

The applicant provided information regarding the facility's proposed water use in Exhibit O of the ASC. As discussed in greater detail in Section IV.R below, the applicant proposes to obtain all water necessary for construction and operation of the Station from the Port of Umatilla under an existing water right. Further, potable water demand is anticipated to be less than 5,000 gallons per day and thus would not require a groundwater permit. Therefore, no new permits are required nor are any permits required to be transferred or modified to supply the water needs of the project.<sup>137</sup> Thus, because the facility would use existing sources of water and no new permits would be required for potable water use construction and operation of the facility will not have any significant impact the protected areas water needs.

As explained in the ASC, during construction wastewater would be generated through (a) stormwater, (b) washing trucks and equipment, (c) testing and commissioning, and (d) human waste. The applicant proposes to direct construction stormwater and wash water to the onsite stormwater detention basin. The applicant proposes to truck wastewater generated during testing and commissioning either offsite for processing and disposal or route it to the HPG for supplemental cooling water makeup water. Human waste would be collected in portable toilets and transported to a licensed sewage treatment plant.<sup>138</sup> Based upon the identified

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<sup>137</sup> ASC, Exhibit L, L-6.

<sup>138</sup> ASC, Exhibit L, L-6.

1 management techniques, no wastewater would be disposed of in the vicinity of any protected  
2 area as it will be retained onsite, trucked offsite and processed, or reclaimed for reuse at HGP  
3 before being land applied by Lamb Weston. In addition, during construction, the applicant  
4 would be subject to compliance with its NPDES #1200-C permit, which includes the  
5 implementation of an Erosion and Sediment Control Plan that will include best management  
6 practices to reduce runoff and further minimize any potential impacts to protected areas from  
7 stormwater runoff.

8  
9 During operations, wastewater would be generated from (a) process water, including cooling  
10 tower blow-down, (b) wash water from occasional sump cleanouts and combustion turbine  
11 washing, and (c) sanitary waste. As explained in the ASC, the applicant proposes to route  
12 wastewater from process water to the HGP as makeup water for that facility's cooling  
13 towers.<sup>139</sup> However, should the applicant not be able to send reclaimed water to the HGP for  
14 reuse, it proposes to use a zero liquid discharge system to process, recycle and reclaim water  
15 onsite. Wash water from sump cleanouts would be transported by a wastewater vender for  
16 treatment and disposal at the Oil Re-Refining Company of Oregon, Inc., as it is deemed  
17 nonhazardous. Further, as explained in Exhibit V, sanitary waste would be collected and treated  
18 in an onsite septic field. Consequently, operational wastewater would not impact any protected  
19 area as it would not be disposed of or discharged in the vicinity of any protected areas as it  
20 would be reclaimed and reused at HGP, recycled and reclaimed onsite via the zero liquid  
21 discharge system, or transported offsite for treatment and disposal. Based upon the proposed  
22 wastewater management techniques, the Council finds that water use and wastewater disposal  
23 from the construction and operation of the facility will result in a significant adverse impact to  
24 protected areas.

#### 25 26 D. *Visual Impacts*

27  
28 As explained in the ASC, the most prominent visible features of the Station would be the 90  
29 foot emissions stacks, a 40 foot cooling tower and the plume generated by the cooling tower.  
30 The step-up substation would be approximately 20-feet high. Based upon the view shed  
31 analysis conducted by the applicant, the Station's emissions stacks would be potentially visible  
32 from portions of the Oregon Trail Area of Critical Environmental Concern, the Hermiston  
33 Agriculture Research and Extension Center, the Cold Springs National Wildlife Refuge, Hat Rock  
34 State Park and McNary National Wildlife Refuge. The step-up substation would potentially be  
35 visible from portions of the Umatilla National Wildlife Refuge, the Irrigon Wildlife Area, and the  
36 Irrigon and Umatilla Hatcheries.

37  
38 However, as discussed in the ASC, while the analysis conducted by the applicant took into  
39 consideration the area topography and structure height, the analysis did not consider the  
40 existing structures in the area and therefore the results of the 'bare earth' analysis represent

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<sup>139</sup> ASC, Exhibit L, L-6.



1 conservative findings. In fact, the Station would not be located in a previously undisturbed view  
2 shed. As explained in the ASC, the HGP and the Lamb-Weston Facilities are both located  
3 adjacent to and directly north and west of the proposed station site. Although the Umatilla  
4 National Wildlife Refuge, McNary National Wildlife Refuge, and the Irrigon and Umatilla  
5 Hatcheries are all located northwest of the Station, and the Irrigon Wildlife Area is directly  
6 north of the facility, the existing industrial facilities between the protected areas and the  
7 Station would obscure views and minimize the visual impact of the Station. In addition, the  
8 facility's stacks would be located adjacent to the stacks of the Hermiston Generating Plant,  
9 which are approximately 150-175 feet high.<sup>140</sup> Consequently, the facility's most visible structure  
10 would not be in high contrast to the surrounding structures. Further, as explained in the ASC,  
11 the step-up substation would be located adjacent to and directly south of the larger McNary  
12 Substation, which would block views of the step-up substation from the north, north-east and  
13 north-west. Urban development of the City of Umatilla would also block views from points to  
14 the west and southwest, according to the ASC, which includes the protected areas cited above  
15 as potentially impacted.<sup>141</sup>

16  
17 In addition to structural visual impacts, the applicant also provided a plume analysis in Exhibit Z  
18 that discusses the potential impacts of the facility's plume on protected areas. As explained in  
19 that analysis, the plume may be occasionally visible from the nearest protected area, the  
20 Hermiston Agriculture Research and Extension Center. The plume would be most visible during  
21 the late fall and winter months when the cloud cover is present; however, the occurrence of  
22 long visible plumes is expected to be minimal because of the ambient weather conditions and  
23 cloud cover.<sup>142</sup> Therefore, a significant adverse visual impact on a protected area is not  
24 anticipated. Further, the nearest Class I area to the station is located over 133 miles from the  
25 Station and the Columbia River Gorge National Scenic Area is located approximately 121 miles  
26 away at its nearest distance. The applicant must obtain a Prevention of Significant  
27 Deterioration/Air Contamination Discharge Permit from DEQ. Review authority of the  
28 ACDP/PSD permits was delegated to DEQ by the U.S. Environmental Protection Agency under  
29 the federal Clean Air Act. The applicant submitted the ACDP/PSD application's to DEQ on  
30 September 12, 2013 and included a copy of the application in the ASC.<sup>143</sup> Therefore, because of  
31 the distance of the facility from Class I areas as well as the required ACDP/PSD permit, the  
32 Council concurs with the applicant's assessment that the Station will have a negligible visual  
33 impact on these areas.<sup>144</sup>

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<sup>140</sup> ASC, Exhibit L, L-8.

<sup>141</sup> ASC, Exhibit L, L-8.

<sup>142</sup> ASC, Exhibit L, L-9.

<sup>143</sup> Included in Exhibit E as well is a letter from the Oregon Department of Environmental Quality, noting that the application had been received and no additional information was needed at that time.

<sup>144</sup> A comment submitted in response to the DPO requests that a condition be included to protect the Oregon Trail and other historic trails recognized in Oregon. The comment did not cite any applicable Council standard, provide any specific concerns regarding the DPO, or request particular revisions of the DPO. Based upon the evidence provided in the ASC, the proposed facility would not result in a significant adverse impact

Based upon the evidence in the record, the Council finds that the facility is not located in any protected areas listed in OAR 345-022-0040 and that the design, construction and operation of the facility will not result in significant adverse impacts to any protected area in the analysis area.

#### IV.F.2. Protected Areas: Conclusions of Law

Based on the foregoing findings and the evidence in the record, the Council concludes that taking into account mitigation, the design, construction and operation of the facility are not likely to result in significant adverse impacts to any protected areas, in compliance with the Protected Area Standard.

#### IV.G. Retirement and Financial Assurance [OAR 345-022-0050]

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

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

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

#### IV.G.1. Retirement and Financial Assurance: Findings of Fact

The Retirement and Financial Assurance Standard requires a finding that the facility site can be restored to a useful, non-hazardous condition at the end of the facility's useful life, should either the certificate holder stop construction or should the facility cease to operate.<sup>145</sup> In addition, the standard requires a demonstration that the applicant can obtain a bond or letter of credit to restore the site to a useful, non-hazardous condition.

##### *A. Retirement*

The applicant has indicated that it intends to operate the facility for as long as a market exists for the electrical energy that it produces. For purposes of the ASC, however, the estimated useful life of the station is 30 years. Under this standard a "useful, non-hazardous condition" is a condition consistent with the applicable local comprehensive land use plan and land use

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to any identified trail under the Council's standards. Therefore, in consideration of the evidence provided in the ASC, the Council does not make any revisions or require additional conditions. PERAPPDoc32.

<sup>145</sup> OAR 345-022-0050(1).

1 regulation.<sup>146</sup> Pursuant to Condition B.5 (mandatory condition: OAR 345-027-0020(7)), the  
2 certificate holder must prevent the development of any conditions on the site that would  
3 preclude restoration of the site to a useful, non-hazardous condition to the extent that  
4 prevention of such site conditions is within the control of the certificate holder. In addition to  
5 B.5, the following mandatory conditions also address the Retirement and Financial Assurance  
6 standard:  
7

8 **Condition G.1 [OAR 345-027-0020(9)]**: The certificate holder shall retire the facility if the  
9 certificate holder permanently ceases construction or operation of the facility. The  
10 certificate holder shall retire the facility according to a final retirement plan approved by  
11 the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual  
12 cost to restore the site to a useful, non-hazardous condition at the time of retirement,  
13 notwithstanding the Council's approval in the site certificate of an estimated amount  
14 required to restore the site.  
15

16 **Condition G.2 [OAR 345-027-0020(16)]**: If the Council finds that the certificate holder has  
17 permanently ceased construction or operation of the facility without retiring the facility  
18 according to a final retirement plan approved by the Council, as described in OAR 345-027-  
19 0110, the Council shall notify the certificate holder and request that the certificate holder  
20 submit a proposed final retirement plan to the department within a reasonable time not to  
21 exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by  
22 the specified date, the Council may direct the department to prepare a proposed final  
23 retirement plan for the Council's approval. Upon the Council's approval of the final  
24 retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-  
25 027-0020(8), and Condition G.4, to restore the site to a useful, non-hazardous condition  
26 according to the final retirement plan, in addition to any penalties the Council may impose  
27 under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is  
28 insufficient to pay the actual cost of retirement, the certificate holder shall pay any  
29 additional cost necessary to restore the site to a useful, non-hazardous condition. After  
30 completion of site restoration, the Council shall issue an order to terminate the site  
31 certificate if the Council finds that the facility has been retired according to the approved  
32 final retirement plan.  
33

34 As stated in the ASC, site restoration would be conducted in compliance with the final  
35 retirement plan and would consist primarily of dismantling and removing equipment and  
36 structures. Related and supporting transmission tower foundations, water and natural gas  
37 pipelines could be left in place to serve future industrial uses, consistent with restoring the site  
38 to a useful, non-hazardous condition. However, if necessary under the retirement plan, as  
39 provided in the ASC, removal of such facilities could and would be accomplished along with the  
40 removal of the other structures and equipment on site.

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<sup>146</sup> Port Westward Generating Project, Final Order, pg. 46

Hazardous materials may be used onsite. However, as explained in relation the Council's Soils Standard above and in further detail in the Waste Minimization section below, hazardous materials would be stored in sealable drums or containers in a secure location onsite. Further, the applicant proposes to develop a Hazardous Materials Management Plan to guide the appropriate management of hazardous substances and decrease the potential for releases which may render the site hazardous. Condition D.6 above requires the site certificate holder to develop the Hazardous Materials Management and Monitoring plan prior to beginning construction. Further, hazardous waste would be removed from the site and disposed of through an appropriate waste disposal service provider.<sup>147</sup> (See conditions N.4, N.5, and N.6.)

For the reasons discussed above and subject to compliance with the site certificate conditions, the Council finds that the actions necessary to restore the site to a useful non-hazardous condition are feasible and that the applicant is capable of restoring the site to a useful, non-hazardous condition.

#### *B. Financial Assurance*

OAR 345-022-0050(2) requires that the Council find that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount necessary to restore the facility's site to a useful, non-hazardous condition. The Retirement and Financial Assurance standard protects the State of Oregon and its citizens in the event that the certificate holder fails to perform its obligation to restore the site under any circumstances. The bond or letter of credit must remain in force until the certificate holder has fully restored the site. The following mandatory condition ensures compliance with this requirement:

**Condition G.3 [OAR 345-027-0020(8)]**: Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.

The applicant estimates that site restoration would cost approximately \$4.560 million, assuming all structures are to be removed from the site.<sup>148</sup> Additionally, for the alternative scenario that includes additional structures associated with the zero liquid discharge system, the cost to retire the facility and restore the site is estimated to be \$4.621 million.<sup>149</sup> The site

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<sup>147</sup> ASC, Exhibit W, W-8.

<sup>148</sup> As a reference for estimating cost restoration, the applicant began with the Oregon Department of Energy's Site Restoration Cost Estimating Guide as an example for costs to be included.

<sup>149</sup> The cost estimates are presented in 2013 dollars.

retirement costs were developed based on order-of-magnitude quantities using in-house information available to Perennial's engineering firm Burns & McDonnell.<sup>150</sup> The following table summarizes the applicant's estimates:

**Table G-1 Applicant's Retirement Cost Estimate**

<b>General Costs</b>	
A. PERMITS	\$2,660
B. MOBILIZATION	\$31,260
C. ENGINEERING	\$48,468
D. PROJECT OVERHEAD	\$328,035
E. HAZARDOUS MATERIALS INSPECTIONS	\$0
F. PROTECTION	\$6,230
G. UTILITY DISCONNECTS	\$2,310
<b>General Costs Subtotal</b>	<b>\$418,963</b>
<b>Site Construction</b>	
A. PRELIMINARY WORK	\$21,143
B. SITE GRADING	\$696,442
C. UNDERGROUND UTILITY REMOVAL	\$73,070
<b>Site Construction Subtotal</b>	<b>\$790,655</b>
<b>Concrete Wrecking</b>	
A. REINFORCED CONCRETE	\$175,453
B. NON-REINFORCED CONCRETE	\$0
<b>Concrete Wrecking Subtotal</b>	<b>\$175,453</b>
<b>Building Wrecking</b>	<b>\$64,121</b>
<b>Steel Wrecking</b>	<b>\$12,865</b>
<b>Timber Wrecking</b>	<b>\$0</b>
<b>Thermal Protection/Liners Wrecking</b>	<b>\$53,612</b>
<b>Equipment Wrecking</b>	<b>\$206,888</b>
<b>Mechanical Wrecking</b>	<b>\$93,203</b>
<b>Electrical Wrecking</b>	<b>\$263,400</b>
<b>Load &amp; Haul</b>	<b>\$270,691</b>
<b>Costs Subtotal</b>	<b>\$2,349,851</b>
Overhead @ 10%	\$234,985
Profit @ 10%	\$258,484
Insurance @ 3%	\$85,300
<b>Specialty Contracts (subcontracted work)</b>	<b>\$0</b>
<b>Subtotal</b>	<b>\$2,928,620</b>

<sup>150</sup> ASC, Exhibit W, W-3.

**Table G-1 Applicant's Retirement Cost Estimate**

<b>Subtotal Adjusted to Current Dollars 2Q 2013</b>	<b>\$3,092,396</b>
Performance Bond @ 1%	\$30,924
<b>Gross Cost (Adjusted)</b>	<b>\$3,123,320</b>
Administration and Project Management @ 10%	\$312,332
Future Developments Contingency @ 20%	\$624,664
Hazardous Materials Management Contingency	\$500,000
<b>Total Site Restoration Cost (current dollars)</b>	<b>\$4,560,316</b>
<b>Total Site Restoration Cost (rounded to nearest \$1,000)</b>	<b>\$4,560,000</b>

1

**Table G-2 Applicant's Retirement Cost Estimate Alternative Scenario with Zero Liquid**

<b>General Costs</b>	
A. PERMITS	\$2,660
B. MOBILIZATION	\$31,260
C. ENGINEERING	\$48,468
D. PROJECT OVERHEAD	\$328,035
E. HAZARDOUS MATERIALS INSPECTIONS	\$0
F. PROTECTION	\$6,230
G. UTILITY DISCONNECTS	\$2,310
<b>General Costs Subtotal</b>	<b>\$418,963</b>
<b>Site Construction</b>	
A. PRELIMINARY WORK	\$21,143
B. SITE GRADING	\$696,863
C. UNDERGROUND UTILITY REMOVAL	\$73,070
<b>Site Construction Subtotal</b>	<b>\$791,076</b>
<b>Concrete Wrecking</b>	
A. REINFORCED CONCRETE	\$176,173
B. NON-REINFORCED CONCRETE	\$0
<b>Concrete Wrecking Subtotal</b>	<b>\$176,173</b>
<b>Building Wrecking</b>	\$80,969
<b>Steel Wrecking</b>	\$12,865
<b>Timber Wrecking</b>	\$0
<b>Thermal Protection/Liners Wrecking</b>	\$53,612
<b>Equipment Wrecking</b>	\$208,258
<b>Mechanical Wrecking</b>	\$93,884
<b>Electrical Wrecking</b>	\$263,400
<b>Load &amp; Haul</b>	\$285,915
<b>Costs Subtotal</b>	\$2,385,116
Overhead @ 10%	\$238,512
Profit @ 10%	\$262,363
Insurance @ 3%	\$86,580
<b>Specialty Contracts (subcontracted work)</b>	\$0
<b>Subtotal</b>	<b>\$2,972,571</b>
<b>Subtotal Adjusted to Current Dollars 2Q 2013</b>	<b>\$3,138,805</b>
Performance Bond @ 1%	\$31,388
<b>Gross Cost (Adjusted)</b>	<b>\$3,170,193</b>
Administration and Project Management @10%	\$317,019
Future Developments Contingency @ 20%	\$634,039
Hazardous Materials Management Contingency	\$500,000
<b>Total Site Restoration Cost (current dollars)</b>	<b>\$4,621,250</b>
<b>Total Site Restoration Cost (rounded to nearest \$1,000)</b>	<b>\$4,621,000</b>

1 The Council reviewed the estimate and confirms that the rates and methods assume a  
2 conservative site restoration cost for the facility as proposed in the ASC. The Council recognizes  
3 that the applicant may need to make adjustments to the design prior to construction of the  
4 facility, and that these changes may result in a change to the estimated costs of restoring the  
5 facility site. However, the Council finds that the applicant's cost of \$4.560 and \$4.621 (should  
6 the alternative scenario be necessary) are reasonable estimates of an amount satisfactory to  
7 restore the site to a useful, non-hazardous condition.

8  
9 To issue the site certificate, the Council must also find that the applicant has a reasonable  
10 likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the  
11 Council to restore the site to a useful non-hazardous condition. The applicant provided  
12 information about its financial capability in Exhibit M. The applicant proposes to provide a  
13 financial assurance bond or letter of credit in a form approved by the Council before beginning  
14 construction. In addition, however, the applicant provided a letter from the Bank of Tokyo-  
15 Mitsubishi, which states that it currently has an existing relationship with Perennial Power  
16 Holdings, Inc. and its parent Sumitomo Corporation and that it would be willing to arrange the  
17 required letter of credit, subject to further information and internal credit approval.<sup>151</sup>

18  
19 Therefore, based upon the evidence provided, the Council finds that the applicant has  
20 demonstrated a reasonable likelihood of obtaining a bond or letter of credit in a form and  
21 amount that is satisfactory to the Council. In addition, the Council adopts the following  
22 condition to ensure a bond or letter of credit in a form and amount satisfactory to restore the  
23 site is submitted:

24  
25 **Condition G.4:** Before beginning construction of the facility, the certificate holder shall  
26 submit to the State of Oregon, through the Council a bond or letter of credit naming the  
27 State of Oregon, acting by and through the Council, as beneficiary or payee. The initial bond  
28 or letter of credit amount for the facility is \$4.560 million, without a zero liquid discharge  
29 system or \$4.61 million with a zero liquid discharge system, depending upon the final design  
30 configuration, to be adjusted to the date of issuance, and adjusted on an annual basis  
31 thereafter, as described in sub-paragraph (b) of this condition:

32  
33 (a) The certificate holder may adjust the amount of the initial bond or letter of credit based  
34 on the final design configuration of the facility. Any revision to the restoration costs should  
35 be adjusted to the date of issuance as described in (b) and subject to review and approval  
36 by the department.

37  
38 (b) The certificate holder shall adjust the amount of the bond or letter of credit using the  
39 following calculation:

---

<sup>151</sup> ASC, Exhibit M, Attachment M-2.



1 (A) Adjust the amount of the bond or letter of credit (expressed in second quarter 2013  
2 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator,  
3 Chain-Weight, as published in the Oregon Department of Administrative Services'  
4 "Oregon Economic and Revenue Forecast" or by any successor agency and using the  
5 second quarter 2013 index value and the quarterly index value for the date of issuance  
6 of the new bond or letter of credit. If at any time the index is no longer published, the  
7 Council shall select a comparable calculation to adjust second quarter 2013dollars to  
8 present value.

9 (B) Round the result total to the nearest \$1,000 to determine the financial assurance  
10 amount.

11  
12 (c) The certificate holder shall use an issuer of the bond or letter of credit approved by the  
13 Council.

14  
15 (d) The certificate holder shall use a form of bond or letter of credit approved by the  
16 Council. The certificate holder shall describe the status of the bond or letter of credit in the  
17 annual report submitted to the Council under OAR 345-026-0080. The bond or letter of  
18 credit shall not be subject to revocation or reduction before retirement of the facility site.

19  
20 IV.G.2. Retirement and Financial Assurance: Conclusions of Law

21  
22 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
23 the site certificate conditions, the Council finds that the facility complies with the Council's  
24 Retirement and Financial assurance standard.

25  
26 IV.H. Fish and Wildlife Habitat [OAR 345-022-0060]

27  
28 *To issue a site certificate, the Council must find that the design, construction and operation of*  
29 *the facility, taking into account mitigation, are consistent with the fish and wildlife habitat*  
30 *mitigation goals and standards of OAR 635-415-0025 in effect as of September 1, 2000.*

31  
32 IV.H.1. Fish and Wildlife Habitat: Findings of Fact

33  
34 The Fish and Wildlife Habitat Standard requires the Council to find that throughout the  
35 construction and operation of the facility, the certificate holder's activities will be consistent  
36 with the Oregon Department of Fish and Wildlife's (ODFW) habitat mitigation goals and  
37 standards.<sup>152</sup>

38  
39 In OAR 635-415-0025, ODFW defines six habitat categories in order of value to wildlife. The rule  
40 establishes mitigation goals and corresponding implementation standards for each habitat

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<sup>152</sup> OAR 635-415-0025.

category. Further, ODFW rules define habitat under two broad classifications: “essential” and “important.” Essential, under OAR 635-415-005, is any habitat condition or set of conditions which, if diminished in quality or quantity, would result in depletion of a fish or wildlife species. “Important” is any habitat recognized as a contributor to sustaining fish and wildlife populations on a physiographic province basis over time.

Habitat Category 1 is “irreplaceable, essential habitat for a fish and wildlife species, population or a unique assemblage of species and is limited on either a physiographic province or a site-specific basis, depending on the individual species, population or unique assemblage.” The mitigation goal for Category 1 habitat is no loss of either habitat quantity or quality. This goal requires avoidance of impacts.

Habitat Category 2 is “essential habitat for a fish or wildlife species, population or unique assemblage of species and is limited either on physiographic province or site-specific basis depending on the individual species, population or unique assemblage.” The mitigation goal if impacts are unavoidable is no net loss<sup>153</sup> of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality. To achieve this goal, impacts must be avoided or those impacts which cannot be avoided must be mitigated through “reliable in-kind, in-proximity” habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality.<sup>154</sup>

Habitat Category 3 is “essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.” The mitigation goal for Category 3 is no net loss of either habitat quantity or quality. This goal is achieved by avoidance of impacts or by mitigation of unavoidable impact through “reliable in-kind, in-proximity” habitat mitigation, achieve no net loss in either pre-development habitat quantity or quality.

Habitat Category 4 is “important habitat for fish and wildlife species.” The mitigation goal for Category 4 is no net loss in either existing habitat quantity or quality. This goal is achieved by

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<sup>153</sup> OAR 635-415-0005 defines “net loss” as a loss of habitat quantity and/or habitat quality resulting from a development action despite mitigation measures having been taken. “Net Benefit” means an increase in overall in-proximity habitat quality or quantity after a development action and any subsequent mitigation measures have been completed and monitored.

<sup>154</sup> OAR 635-415-0005 defines “in-kind habitat mitigation” as habitat mitigation measures that “recreate similar habitat structure and function to that existing prior to the development action.” OAR 635-415-0005 defines “in-proximity habitat mitigation” as follows: “habitat mitigation measures undertaken within or in proximity to areas affected by a development action. For the purposes of this policy, ‘in proximity to’ means within the same home range, or watershed (depending on the species or population being considered) whichever will have the highest likelihood of benefiting fish and wildlife populations directly affected by the development.” OAR 635-415-0005 defines “reliable method” as “a mitigation method that has been tested in areas with site factors similar to those affected by a development action and the area in which the mitigation action is being proposed and that has been found (e.g., through field trials, demonstration projects or scientific studies) to produce the habitat effects required to meet the mitigation goal for that action.”

1 “reliable in-kind or out-of-kind, in-proximity or off-proximity” habitat mitigation to achieve no  
2 net loss in either pre-development habitat quantity or quality.”

3  
4 Habitat Category 5 is “habitat for fish and wildlife having high potential to become either  
5 essential or important habitat.” The mitigation goal, if impacts are unavoidable, is to provide a  
6 net benefit in habitat quantity or quality. This goal is achieved through actions that contribute  
7 to essential or important habitat.

8  
9 Habitat Category 6 is “habitat that has low potential to become essential or important habitat  
10 for fish and wildlife.” The mitigation goal is to minimize impacts. The goal is achieved by actions  
11 that minimize direct habitat loss and avoid impacts to off-site habitat.

12  
13 The project order identifies the analysis area for fish and wildlife habitat disturbance as the  
14 area within the site boundary and the area 0.5 mile from the site boundary. The applicant  
15 addressed the Council’s Fish and Wildlife Standard in Exhibit P of the application.

16  
17 A. Habitat Categories in the Analysis Area

18  
19 To identify the habitat characteristics of the proposed site, the applicant mapped the area using  
20 a two step-process. First, the applicant conducted a desktop analysis utilizing information from  
21 existing databases. Second, the applicant verified and supplemented the desktop analysis with  
22 field observations. According to the ASC, the Oregon National Gap Analysis Program (OAR GAP)  
23 contains the most current and accurate spatial land cover dataset available for the Site.  
24 Therefore, the applicant utilized the OAR GAP as the foundation for vegetation and habitat  
25 mapping, along with aerial photography.<sup>155</sup> For the second step, two field biologists walked the  
26 area designated for the Station, the natural gas pipeline right-of-way, the step-up substation  
27 site and its associated underground transmission line ROW.<sup>156</sup> Staff from ODFW reviewed the  
28 preliminary application and recommended the applicant re-evaluate the functional condition of  
29 areas where long-billed curlews and Savanna Sparrows were present as that habitat would  
30 likely be functioning at a higher level than initially categorized. In response to the comments  
31 and the department’s Request for Additional Information, the applicant re-assessed and re-  
32 classified Weedy Grasslands #1, #2, #4, and #5 as Category 5 rather than Category 6. ODFW did  
33 not submit additional comment on the ASC in response to the applicant’s reassessment.

34  
35 Category 6

36  
37 Weedy Grassland #3

---

<sup>155</sup> ASC, Exhibit P, P-4 4.

<sup>156</sup> The E&E biologists drove along the transmission line to verify the OR GAP data. They did not walk the transmission line ROW because the existing transmission line is being reconductored and new ground disturbance is not anticipated.

1 The applicant categorized “weedy grassland #3” as Category 6 because of the high level of  
2 ground disturbance and anthropogenic disturbances (homes, interstate highway traffic), which  
3 indicate that it is has the low potential to become essential or important habitat for fish and  
4 wildlife. As explained in the ASC, the habitat appeared to have endured heavy grazing and be  
5 subject to regular disturbance from farm equipment and vehicles. The dominate vegetation on  
6 this land includes cheatgrass, foxtail barley and bare ground.<sup>157</sup> During field surveys, long-billed  
7 curlews were observed foraging in the adjacent agricultural field; however long-billed curlews  
8 were not observed nesting in this habitat. The applicant anticipates no permanent impacts and  
9 0.68 acres of temporary impact to this habitat.

#### 11 Weedy Grassland #6

12 The applicant categorized “weedy grassland #6” as Category 6 because of the high densities of  
13 non-native plants and noxious weeds, its small area, and the close proximity of high levels of  
14 disturbance by anthropogenic activities. This habitat shows evidence of relatively recent  
15 agricultural activities and consists of vegetation dominated by mustards, fiddlenecks,  
16 cheatgrass and prickly Russian thistle. 5-10 percent of the cover is bare ground and small  
17 mammal burrows were present.<sup>158</sup> The applicant anticipates approximately 3.00 acres of  
18 permanent impact from the facility and 0.71 acres of temporary impact.

#### 20 Agriculture

21 The applicant categorized “agriculture” as Category 6 because the land is actively managed for  
22 human use. This habitat consists entirely of active circular crop fields. The applicant does not  
23 anticipate any permanent impacts from the facility and 6.77 acres of temporary impacts on this  
24 habitat.

#### 26 Developed

27 As explained in the ASC, this category was used to denote any area that had been completely  
28 altered from its natural state for anthropogenic uses, excluding Agriculture. The applicant  
29 included, but did not limit this designation to, roads, residential and commercial buildings,  
30 lawns, and cattle yards. These lands have been classified as Category 6 because they are  
31 primarily for human use.<sup>159</sup> The applicant anticipates 1.16 acres of permanent impact and 5.38  
32 acres of temporary impact.

#### 34 Open Water (canals)

35 Several irrigation canals exist within the analysis area and are managed by the Westland  
36 Irrigation District with water supplied by the U.S. Bureau of Reclamation through the Umatilla  
37 Basin Project. However, as explained in the ASC, the canals lack the riparian vegetation and  
38 physical structure necessary to support important fish populations (and are not jurisdictional  
39 waters of the state, see Removal-fill discussion below). Therefore, the application classified the

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<sup>157</sup> ASC, Exhibit P, P-6

<sup>158</sup> ASC, exhibit P, p.7

<sup>159</sup> ASC, Exhibit P, P-9.

1 canals as habitat Category 6. The applicant anticipates 0.29 acres of permanent impact to the  
2 canals and 0.12 acres of temporary impact from the facility.

3  
4 Category 5

5  
6 Weedy Grassland #1

7 The applicant categorized “weedy grassland #1” as Category 5 because it is habitat for fish and  
8 wildlife having high potential to become either essential or important habitat. As explained in  
9 the application this habitat was heavily disturbed and dominated by non-native plant species,  
10 likely because it is located between agricultural crop circles.<sup>160</sup> Cheatgrass makes up  
11 approximately 70 to 80 percent of this habitat, with mustards, redstem stork’s bill, fiddlenecks,  
12 prickly Russian thistle, rubber rabbitbrush, yellow rabbitbrush and sagebrush also documented.  
13 During field observations, two wildlife species were observed using the habitat, Chipping  
14 Sparrows and Savannah Sparrows. Additionally, the applicant noted in the ASC that field  
15 observations suggest that Long-billed curlews may also potentially nest in these grasslands;  
16 however, none were witnessed during observation. The applicant does not anticipate any  
17 permanent disturbance to Weedy Grassland #1; and anticipates approximately 9.71 acres to be  
18 temporarily impacted.

19  
20 Weedy Grassland #2

21 The applicant categorized “weedy grassland #2” as Category 5 because it is habitat for fish and  
22 wildlife having high potential to become either essential or important habitat.” This habitat is  
23 limited to a small area near milepost 2 of the natural gas pipeline route and was similar to  
24 weedy grassland #1 in terms of vegetation in the area. As explained in the ASC, cheatgrass was  
25 again dominate, along with bunchgrass species, yellow rabbitbrush and cereal rye. Also present  
26 in small numbers were sagebrush, mustards and fiddlenecks. No wildlife species were observed  
27 in this habitat during survey. The applicant does not anticipate any permanent disturbance to  
28 Weedy Grassland #2; and anticipates approximately .59 acres of temporary impact.

29  
30 Weedy Grassland #4

31 The applicant categorized “weedy grassland #4” as Category 5 due to the presence of long-  
32 billed curlews, which indicates this area has the potential to become either essential or  
33 important habitat. The vegetation reported in this area was cheatgrass, cereal rye, mustards,  
34 fiddlenecks and Scotch thistle. While the vegetation mix is similar to “weedy grasslands #1” and  
35 “weedy grasslands #2” this area has a larger presence of the cereal rye and Scotch thistle,  
36 which are classified as noxious weeds in Umatilla County. As explained in the ASC, this is the  
37 largest contiguous patch of grassland in the Station site and the natural gas pipeline ROW.<sup>161</sup> As  
38 stated above, long-billed curlews were observed during the field surveys, in addition to the  
39 Red-tailed Hawk, which was actively nesting in the black locust trees that line the western edge

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<sup>160</sup> ASC, Exhibit P, P-5

<sup>161</sup> ASC, Exhibit P, pg. 7.

1 of the habitat. The applicant anticipates approximately 18.52 acres of permanent impact and  
2 10.10 acres of temporary impact.

#### 3 4 Weedy Grassland #5

5 The applicant categorized “weedy grassland #5” as Category 5 due to its high density of non-  
6 native plants and noxious weeds, its small area and the close proximity to high levels of  
7 disturbance by anthropogenic activities. As explained in the ASC, bare soils were more  
8 prevalent here than in weedy grasslands #1-4 and small mammal burrows were present.  
9 Vegetation present at weedy grassland #5 included Sandberg’s bluegrass (made up more than  
10 50% of this habitat), diffuse knapweed, rubber rabbitbrush, prickly Russian thistle, and  
11 wheatgrass. The applicant anticipates 0.51 acres of permanent impact and 0.57 acres of  
12 temporary impact.

#### 13 14 Category 3

##### 15 Shrub Steppe

16 As explained in Exhibit P, the applicant identified eight relatively small patches of shrub steppe  
17 habitat in the analysis area surrounding the station site and natural gas pipeline ROW. The  
18 patches of habitat identified are small and disconnected, and contain non-native species;  
19 however, the applicant categorized shrub steppe as Category 3 because of the importance of  
20 shrub steppe habitat for wildlife.<sup>162</sup> As explained in the ASC, this habitat is considered limited in  
21 the larger context of the Columbia Plateau Ecoregion. In the analysis area, the habitat consists  
22 primarily of antelope bitterbrush, rubber rabbitbrush, yellow rabbitbrush, cheatgrass,  
23 mustards, redstern stork’s bill, prickly Russian thistle, and fiddlenecks.<sup>163</sup> Sagebrush Sparrow is  
24 an ODFW sensitive species that prefers shrub steppe habitats and may find the shrub steppe  
25 patches near the station site to be suitable habitat, regardless of the relatively limited habitat  
26 area and lack of connectivity.<sup>164</sup> The applicant does not anticipate any permanent impact to  
27 Shrub Steppe; however, and anticipates 2.03 acres of temporary impacts to the habitat.

#### 28 29 Category 2

##### 30 Riparian

31 The applicant identified the woodland and thicket habitat running along the Umatilla River as  
32 “riparian” habitat which qualifies as Category 2 habitat because they are both important to fish  
33 and wildlife species/populations and limited in the physiographic province. The applicant does  
34 not anticipate any impacts, permanent or temporary, to the habitat.

35  
36 Open Water (Umatilla River).As explained in the ASC, the Umatilla River supports important fish  
37 populations, including the potential for state sensitive species; therefore, the applicant

---

<sup>162</sup> ASC, Exhibit P, P-8.

<sup>163</sup> Field surveys were limited to the station’s site and the natural gas pipeline ROW due to property access restrictions.

<sup>164</sup> ASC, Exhibit P, P-8.

1 designated the river as Category 2. The applicant does not anticipate any impacts, permanent  
2 or temporary, to the habitat.

3  
4 Because habitats can and will change over time, to ensure the habitat categories identified in  
5 the ASC remain accurate at the time of construction, the Council adopts the following  
6 conditions:

7  
8 **Condition H.1:** Before beginning construction, the certificate holder shall provide the  
9 department and Oregon Department of Fish and Wildlife (ODFW) a detailed map of the  
10 facility site, showing all project components, and a table showing the acres of temporary  
11 habitat impacted by habitat category and subtype and the acres of permanent habitat  
12 impacted by habitat category and subtype. The maps of the facility site shall indicate the  
13 habitat categories of all areas that will be affected during construction. In classifying the  
14 affected habitat into habitat categories, the certificate holder shall consult with ODFW. The  
15 certificate holder shall not begin ground disturbance in an affected area until the habitat  
16 assessment has been approved by the department, in consultation with ODFW. The  
17 certificate holder shall not construct any facility components within areas of Category 1  
18 habitat and shall avoid temporary disturbance of Category 1 habitat.

19  
20 **Condition H.2:** Prior to commencement of construction, following completion of condition  
21 H.1, the certificate holder shall consult with the Oregon Department of Fish and Wildlife  
22 (ODFW) to determine the final acreage of habitat mitigation required. Mitigation shall be  
23 provided in accordance with the final acreage determinations provided in response to  
24 Condition H.1 and consistent with a Habitat Mitigation Plan, if determined necessary, as  
25 approved by the department and ODFW

26  
27 (a) A final Habitat Mitigation Plan, if determined necessary, and ODFW's concurrence of  
28 that plan shall be submitted to the department no less than 30 days prior to the  
29 beginning of construction.

30 (b) The final Habitat Mitigation Plan, if necessary, may be amended from time to time by  
31 agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such  
32 amendments may be made without amendment of the site certificate. The Council  
33 authorizes the department to agree to amendments to this plan. The department shall  
34 notify the Council of the Final Habitat Mitigation Plan and all amendments to the plan.  
35 The Council retains the authority to approve, reject or modify any amendments of this  
36 plan agreed to by the department.

37  
38 B. Potential Adverse Impacts and Mitigation

39  
40 Table H-1 below shows the potential permanent and temporary disturbances to each habitat  
41 category in acres.

**Table H-1 Potential Permanent and Temporary Disturbances (in acres) to Each Habitat Type**

<b>Permanent Disturbances (in acres) to Each Habitat Type</b>		
<b>Habitat Type</b>	<b>Mitigation Category</b>	<b>Disturbance Acres</b>
Weedy Grassland #1	5	0.00
Weedy Grassland #2	5	0.00
Weedy Grassland #3	6	0.00
Weedy Grassland #4	5	18.52
Weedy Grassland #5	5	0.51
Weedy Grassland #6	6	3.00
Agriculture	6	0.00
Shrub Steppe	3	0.00
Riparian	2	0.00
Open Water	6	0.29
Developed	6	1.16
<b>Total =</b>		<b>23.48</b>
<b>Temporary Disturbances (in acres) to Each Habitat Type</b>		
<b>Habitat Type</b>	<b>Mitigation Category</b>	<b>Disturbance Acres</b>
Weedy Grassland #1	5	9.71
Weedy Grassland #2	5	0.59
Weedy Grassland #3	6	.68
Weedy Grassland #4	5	10.1
Weedy Grassland #5	5	0.57
Weedy Grassland #6	6	0.71
Agriculture	6	6.77
Shrub Steppe	3	2.03
Riparian	2	0.00
Open Water	6	0.12
Developed	6	5.38
<b>Total =</b>		<b>36.6</b>

As noted above and explained in the ASC, approximately 81 percent of the areas of permanent disturbance would consist of weedy grasslands that are classified as “habitat category 5.” The remainder of the areas to be permanently impacted by the project would be highly disturbed weedy grasslands, developed areas, and open water habitats that are classified as “habitat category 6.” Permanent ground disturbance related to construction would occur at the energy



1 facility site, the step-up substation and the riser structures associated with the step-up  
2 substation.

3  
4 In addition to permanent impacts, the applicant anticipates that approximately 57 percent of  
5 areas temporarily disturbed to be weedy grasslands classified as “habitat category 5,” and  
6 approximately 37 percent to be highly disturbed weedy grasslands, active agriculture,  
7 developed areas, and open water areas classified as “habitat category 6.” Additionally, the  
8 remaining six percent to experience temporary disturbance would be 2.03 acres of shrub  
9 steppe habitat that is classified as “habitat category 3” within the natural gas pipeline ROW.<sup>165</sup>  
10 Total construction duration for the station is expected to be 22 months, from mobilization to  
11 commencement of commercial operation. At peak construction, the applicant estimates that  
12 200 to 225 construction workers would be employed at the project site. During construction,  
13 the activities associated with temporary disturbance would include flattening of vegetation by  
14 construction vehicles and removal of topsoil and vegetation through grading, excavation or  
15 drilling.<sup>166</sup> However, the applicant proposes to restore all non-cultivated temporary disturbance  
16 areas to original grade and soil condition, and to and re-contour and de-compact it, if  
17 necessary, after final construction.<sup>167</sup> Following restoration of the grade, the applicant proposes  
18 to then evaluate whether re-seeding or other vegetation techniques are required to return the  
19 area to preconstruction vegetation condition. If necessary, the applicant proposes to initiate re-  
20 seeding immediately after construction is completed on that part of the facility.<sup>168</sup> The  
21 applicant’s goal in restoring the areas temporarily disturbed is to return all areas to a vegetative  
22 cover and species assemblage consistent with the pre-construction conditions, or better.<sup>169</sup>  
23 Based upon the potential temporary impacts and to ensure areas temporarily disturbed are  
24 returned to preconstruction conditions or better, the Council adopts the following conditions:  
25

26 **Condition H.3:** The certificate holder shall restore all areas temporarily impacted due to  
27 construction to pre-construction condition or better after construction has been completed.  
28

29 **Condition H.4:** Before beginning construction, the certificate holder shall prepare a final  
30 Project Restoration Monitoring Plan and Project Biological Monitoring Plan in consultation  
31 with the department and Oregon Department of Fish and Wildlife (ODFW).  
32

33 (a) The final plans and ODFW’s concurrence must be submitted to the department no  
34 less than 30 days prior to the beginning of construction. The certificate holder shall  
35 implement the requirements of the approved plan during all phases of construction and  
36 operation of the facility, as applicable.

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<sup>165</sup> ASC, Exhibit P, P-19.

<sup>166</sup> ASC, Exhibit P, Appendix P-3, pg. 2

<sup>167</sup> ASC, exhibit P, Appendix P-2, Pg-8.

<sup>168</sup> ASC, Exhibit P, Appendix P-2, Pg-8.

<sup>169</sup> ASC, Exhibit P, Appendix P-3, pg. 6.

(b) The plans may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such amendments may be made without amendment to the site certificate. The Council authorizes the department to agree to amendments of this plan; however, the Council retains the authority to approve, reject or modify any amendment of this plan agreed to by the department.

Direct impacts on wildlife from sensory disturbances are possible during construction and operation as noise, vibrations and human presence could cause displacement, or avoidance of areas and/or nest abandonment by breeding birds.<sup>170</sup> Additionally, sensory disturbances can cause stress, displacement or avoidance behavior resulting in disruptions in essential activities such as foraging, reproduction, and parental care. Nonetheless, the applicant anticipates project-related sensory disturbance impacts to be intermittent and short term, occurring only during construction work hours and ceasing after construction activities have moved from the vicinity because during operation, project personnel, equipment and vehicles would substantially reduce as the applicant only anticipates 6 to 8 full time employees at the site.<sup>171</sup> Further, the analysis area currently has an elevated level of human activity and noise as it includes the City of Umatilla as well as several interstate routes and highways, and industrial/energy developments.

No excavation or grading would occur during the reconductoring of the transmission line. Installation of the additional new poles (maximum of 6), would include ground disturbing activities; however, those ground disturbing activities would occur within the boundary of the energy facility site or the existing UEC ROW and those temporary impacts are accounted for in the impact assessment above (0.46 acres of impact).<sup>172</sup> As explained in the ASC, major equipment required for reconductoring may include reel stands, tensioner, puller reel winder, pilot line winder, splicing cart and pulling vehicle. The applicant estimates that 12 stringing locations would be required for the reconductoring effort.<sup>173</sup> However, as explained by the applicant, each stringing location would be contained within the existing transmission ROW and would measure for a total of approximately 1.38 acres of temporary disturbance. Additionally, while transmission lines have the potential for collision and electrocution, risks to birds and bats are not likely to be increased by the reconductoring in consideration of the conditions below.

To ensure the facility is constructed in accordance with the Council's Fish and Wildlife standard and impacts avoided as able, the Council adopts the following conditions:

**Condition H.5:** Prior to commencing construction, all project personnel shall attend an environmental training session conducted by the certificate holder. The training shall

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<sup>170</sup> ASC, Exhibit P, P-17.

<sup>171</sup> ASC, Exhibit P, P-18, 20.

<sup>172</sup> ASC, Exhibit B, B-15.

<sup>173</sup> ASC, Exhibit P, P-19.

1 include, but not be limited to, the following topics: identification of approved project  
2 boundaries and access roads; identification of sensitive wetland and waterbody resources;  
3 identification of special status-plant and wildlife species; techniques regarding avoidance  
4 and minimization measures the certificate holder will implement; the role of the onsite  
5 biologist; the notification process to be followed if new sensitive resources are identified.  
6

7 **Condition H.6:** The certificate holder shall design, construct, maintain and operate the  
8 reconducted transmission line following the current Avian Power Line Interaction  
9 Committee guidelines to minimize risk of avian mortality.  
10

11 **Condition H.7:** The certificate holder shall restrict vehicular travel along the transmission  
12 line and pipeline to the right of way (ROW) and other established areas within the  
13 construction, access or maintenance easements. Additionally, the certificate holder shall  
14 impose speed limits during construction for access roads to reduce dust emissions, maintain  
15 safety and protect wildlife.  
16

17 Based on the evidence in the record, the Council finds that the design, construction and  
18 operation of the facility, taking into account mitigation, are consistent with the fish and wildlife  
19 habitat mitigation goals and standards.  
20

#### 21 C. State Sensitive Species

22

23 To identify state sensitive species that might be present in the analysis area, the applicant first  
24 conducted a literature review and queries of available databases. The applicant then verified  
25 the species identified from the desktop during baseline field surveys and through consultation  
26 with ODFW and Oregon Department of Agriculture.<sup>174</sup>  
27

28 The applicant conducted surveys for special status plant species on May 9 and August 1, 2013.  
29 Prior to conducting the surveys, the applicant prepared a table of species listed by the USFWS  
30 and Oregon Department of Agriculture that potentially occur in the Project Area.  
31

32 Table P-1 of the ASC, lists the sensitive and candidate species that may be present in the  
33 analysis area. The following discusses each sensitive and candidate species identified in Table P-  
34 1 that was observed or is “possibly or likely” to occur within the analysis area.  
35

#### 36 Inland Columbia Redband Trout

37 As explained in ASC, the Umatilla River provides habitat for the Inland Columbia Redband Trout.  
38 The transmission line for the facility would span the Umatilla River; however, as explained  
39 above, the transmission line infrastructure already exists and already spans the Umatilla River.  
40 The applicant proposes to upgrade the line from a 115-kV to a 230-kV line but would rely on the

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<sup>174</sup> ASC, Exhibit P, p. 10.

1 existing infrastructure for the majority of the line. No new planned transmission line  
2 construction would result in ground disturbing activities that could impact the Umatilla River. In  
3 addition, the applicant notes that the natural gas lateral pipeline would also traverse irrigation  
4 canals that connect to the Umatilla River. However, these canals do not meet the habitat  
5 requirements of redband trout, which require cool temperature waters. Based on this analysis,  
6 there are no project-related issues of concern regarding this species.<sup>175</sup>

#### 7 8 Western Toad

9 As explained in the ASC, the analysis area comprises fair to good habitat for this species  
10 because western toads live in a variety of habitats, which include arid shrubby areas, suburbs,  
11 and irrigated agricultural areas. The western toads breed in aquatic habitats, which could  
12 include stock ponds and reservoirs. However, based upon the applicant's review, there are no  
13 ORBIC records of western toads. Further, as stated in Exhibit P, the project would not  
14 permanently impact water bodies or wetlands.<sup>176</sup> Temporary impacts are possible, during  
15 construction, due to indirect impacts associated with the increase in noise and human  
16 presence.<sup>177</sup>

#### 17 18 Swainson's Hawk

19 As provided in the ASC, this species is likely to occur in the analysis area and the Station site as  
20 there are numerous records of Swainson's Hawk in the Hermiston area and they migrate  
21 through and breed in Eastern Oregon.<sup>178</sup> The species prefer open habitats and are most  
22 common in bunchgrass prairie and irrigated farmland.<sup>179</sup> The applicant does not anticipate that  
23 the project operation will impact or present issues of concern for the Swainson's Hawks.  
24 However, construction activities could present issues of concern if active nests are located in  
25 close proximity to the construction source; however, these impacts could be mitigated by  
26 avoiding disturbance of active nests.<sup>180</sup> Mitigation is discussed below.

#### 27 28 Long-Billed Curlew

29 As explained in the ASC, long-billed curlew have been documented in the Hermiston area  
30 during the migration and breeding season. The long billed curlew arrives in Oregon in mid-  
31 March and remains as late as October or November.<sup>181</sup> The species breeds primarily in  
32 grasslands, particularly in those dominated by cheatgrass. As with Swainson Hawks, the  
33 applicant does not anticipate impacts to the species, unless active nests are present in or very  
34 near the construction area. As discussed below, the applicant proposes to mitigate the

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<sup>175</sup> ASC, Exhibit P, P-10.

<sup>176</sup> ASC, Exhibit P, P-10.

<sup>177</sup> ASC, Exhibit P, P-10

<sup>178</sup> ASC, Exhibit P, P-13.

<sup>179</sup> ASC, Exhibit P, P-13.

<sup>180</sup> ASC, Exhibit P, P-13.

<sup>181</sup> ASC, Exhibit P, P-13.

1 potential impacts to the long-billed curlew due to project construction by avoiding disturbance  
2 of any active nests.<sup>182</sup>

#### 4 Peregrine Falcon

5 Peregrine Falcons nest on cliffs and occur as resident and migratory populations in Oregon.  
6 However, as explained by the applicant, although there are numerous records of Peregrine  
7 Falcons in the Boardman area (23 miles east of the project site), the construction and operation  
8 of the project is not anticipated to impact the species because there is no suitable nesting  
9 substrates (i.e. cliffs) in the analysis area.<sup>183</sup>

#### 11 Loggerhead Shrike

12 As explained in the ASC, Loggerhead Shrike's breed in eastern Oregon and are rare but regular  
13 in the winter and have been observed in the Hermiston area.<sup>184</sup> The analysis area is composed  
14 of fair to good quality habitat for the species as they prefer open habitats with scattered trees  
15 or shrubs, which may include pastures, mowed roadsides, golf courses, agricultural lands,  
16 riparian areas and open woodlands.<sup>185</sup> The applicant does not anticipate any impacts on this  
17 species from the construction and operation of this project, unless active nests are documented  
18 in close proximity to construction activities. Mitigation is discussed below.

#### 20 Sagebrush Sparrow:

21 As explained in the ASC, Sagebrush sparrow are migrants and breeders in Oregon and  
22 associated with sagebrush and other high desert shrub habitats. Small, isolated patches of  
23 Sagebrush Sparrow occur throughout the analysis area; however, sagebrush habitat is not  
24 existent in the areas of construction for the project. There are sagebrush plants that do occur in  
25 a few very small isolated patches amidst agriculture and weedy grassland vegetation, but as  
26 explained in the ASC, these habitat patches would not be able to support breeding Sagebrush  
27 Sparrows.<sup>186</sup> Therefore, the applicant does not anticipate any project-related impacts to this  
28 species.<sup>187</sup>

#### 30 Grasshopper Sparrow

31 Fair to good habitat is available in small, scattered patches in the analysis area, as Grasshopper  
32 Sparrows breed in grasslands with an absence of woody shrubs. Based on the applicant's search  
33 on ORBIC, there is potential habitat for the species near the southern terminus of the natural  
34 gas pipeline and along the transmission line near the mouth of the Umatilla River. However,  
35 based on the applicant's field verification of the ORBIC-identified habitat near the southern  
36 terminus of the natural gas pipeline, the area is highly unlikely to support Grasshopper

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<sup>182</sup> ASC, Exhibit P, P-13.

<sup>183</sup> ASC, Exhibit P, P-13.

<sup>184</sup> ASC, Exhibit P, P-14.

<sup>185</sup> Id.

<sup>186</sup> ASC, Exhibit P, P-14.

<sup>187</sup> ASC, Exhibit P, P-14.

1 Sparrows because the area is dominated by active agriculture and grassy areas of dense,  
2 invasive weeds.<sup>188</sup> According to the ASC, several Grasshopper Sparrows have been documented  
3 in recent years in the Boardman area, along with two observations at the Umatilla Army Depot.  
4 The applicant proposes to clear some grassland habitats; however, the applicant states that  
5 the grassland habitat to be cleared is already disturbed and dominated by invasive weeds,  
6 which would be unlikely to support breeding Grasshopper Sparrows.<sup>189</sup> Mitigation is discussed  
7 below.

#### 8 9 California Myotis

10 California Myotis forage along clumps of trees, on woodland edges and over open water. They  
11 roost in both natural and man-made structures, including buildings, mines, rock crevices, cliff  
12 faces and hollow trees. While the analysis area includes fair to good habitat for this species,  
13 there are no documented records of the species in the analysis area, according to the ASC.<sup>190</sup>  
14 While the species could be disturbed by construction-related activities if active roosts occur in  
15 close proximity, the applicant does not anticipate any impacts because there is substantial  
16 anthropogenic disturbance already in the analysis area and construction is not planned to occur  
17 in close proximity to suitable man-made structures for roosting.<sup>191</sup>

#### 18 19 White-Tailed JackRabbit

20 There are no documented records of this species in the analysis area. As explained by the  
21 applicant, the White-Tailed jackrabbit prefers open fields and ryegrass habitat and cleared  
22 vegetation may prove to be suitable for the species. However, the applicant does not anticipate  
23 any impacts to this species because anthropogenic disturbance is already common in the  
24 area.<sup>192</sup>

#### 25 26 Columbia Cress

27 Columbia Cress grows near many types of water bodies and in a variety of soils. However, as  
28 explained in the ASC, the most likely locations for its occurrence in the analysis area is along the  
29 Columbia and Umatilla Rivers and their tributaries as well as irrigation ditches and roadside  
30 ditches. However, there are no known occurrences of this species in the analysis area and no  
31 individuals were observed; therefore, the applicant does not anticipate any issues of concern  
32 for this species.<sup>193</sup>

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<sup>188</sup> ASC, Exhibit P, P-14

<sup>189</sup> ASC, Exhibit P, P-15.

<sup>190</sup> ASC, Exhibit P, P-15.

<sup>191</sup> ASC, Exhibit P, P-15.

<sup>192</sup> ASC, Exhibit P, P-15.

<sup>193</sup> ASC, exhibit P, P-16.

1 D. Mitigation

2  
3 Because some sensitive and candidate species were observed and/or have the potential to  
4 occur within the analysis area, the Council adopts the following conditions, as recommended by  
5 the applicant, to mitigate any potential temporary impacts associated with construction or  
6 operation of the facility,  
7

8 **Condition H.8:** During all years in which construction occurs, if construction related  
9 activities occur during the raptor breeding season (February 1 through August 31), the  
10 certificate holder must conduct pre-construction surveys within 0.5 miles of all proposed  
11 project features for Ferruginous Hawk nests, and within 0.25 miles for all other raptor  
12 species nests, including burrowing owl burrows. If active nests are located, the certificate  
13 holder shall notify the department and the Oregon Department of Fish and Wildlife  
14 (ODFW), and construction-related activities must be restricted within 0.5 miles of  
15 Ferruginous Hawk nests and 0.25 miles of all other raptor nests until the nests have failed or  
16 chicks have fledged. A biologist shall monitor the status of the active nests daily during  
17 nearby active construction and document potential adverse interactions with the project.  
18

19 **Condition H.9:** During all years in which construction occurs, if construction-related  
20 activities occur during the migratory bird breeding season (March 15 through April 15), pre-  
21 construction surveys must be conducted within 20 feet of all proposed project features for  
22 nests of all native, non-raptor species. Pre-construction nest surveys for non-raptors shall  
23 be valid for only two weeks. If active nests are located, the certificate holder must notify the  
24 department and consult with Oregon Department of Fish and Wildlife (ODFW) to determine  
25 appropriate avoidance and/or mitigation measures necessary. A biologist must monitor the  
26 status of active nests daily during nearby active construction and document potential  
27 adverse interactions with the project.  
28

29 **Condition H.10:** If a California myotis roost is observed during other biological surveys, the  
30 certificate holder must notify the department and consult with Oregon Department of Fish  
31 and Wildlife (ODFW) to determine any appropriate avoidance or mitigation measures  
32 necessary.  
33

34 **Condition H.11:** If construction is to occur during important times (breeding season for  
35 Ferruginous Hawks and other raptors or migration for all native non-raptors), or at close  
36 distances to environmentally sensitive areas (nests of the above), prior to any construction  
37 activities, the certificate holder must consult with Oregon Department of Fish and Wildlife  
38 (ODFW) to determine appropriate measures to take and guidance on seasonal and/or  
39 spatial restrictions to avoid or minimize impact.  
40

1 **Condition H.12:** The certificate holder shall provide the department and the Oregon  
2 Department of Fish and Wildlife (ODFW) with a written summary of all results of biological  
3 preconstruction surveys, including nest surveys, within 10 days of survey completion.  
4

5 **Condition H.13:** The certificate holder shall clearly demarcate boundaries of  
6 environmentally sensitive areas (nests referred to in Condition H.11) during construction to  
7 increase visibility to construction crews.  
8

9 IV.H.2. Fish and Wildlife Habitat: Conclusions of Law  
10

11 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
12 the site certificate conditions, the Council finds that the facility complies with the Council's  
13 Siting Standards for Fish and Wildlife Habitat.  
14

15 IV.I. Threatened and Endangered Species [OAR 345-022-0070]  
16

17 *To issue a site certificate, the Council, after consultation with appropriate state agencies, must*  
18 *find that:*  
19

20 *(1) For plant species that the Oregon Department of Agriculture has listed as threatened*  
21 *or endangered under ORS 564.105(2), the design, construction and operation of the*  
22 *proposed facility, taking into account mitigation:*  
23

24 *(a) Are consistent with the protection and conservation program, if any, that the*  
25 *Oregon Department of Agriculture has adopted under ORS 564.105(3); or*  
26

27 *(b) If the Oregon Department of Agriculture has not adopted a protection and*  
28 *conservation program, are not likely to cause a significant reduction in the likelihood*  
29 *of survival or recovery of the species; and*  
30

31 *(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as*  
32 *threatened or endangered under ORS 496.172(2), the design, construction and operation*  
33 *of the proposed facility, taking into account mitigation, are not likely to cause a*  
34 *significant reduction in the likelihood of survival or recovery of the species.*  
35

36 IV.I.1. Threatened and Endangered Species: Findings of Fact  
37

38 The Threatened and Endangered Species Standard requires the Council, in consultation with  
39 appropriate state agencies, to find that the construction and operation of a facility is consistent  
40 with applicable protection plans for threatened or endangered plant and animal species. The  
41 Council must also determine that the facility's construction and operation are not likely to  
42 cause a significant reduction in a species' survival or recovery. For the purposes of this



1 standard, threatened and endangered species are those identified as such by either the Oregon  
2 Department of Agriculture<sup>194</sup> or the Oregon Fish and Wildlife Commission.<sup>195</sup> Although the  
3 Council standard addresses only those species listed as threatened or endangered by the  
4 responsible agencies in Oregon,<sup>196</sup> and does not directly address federally-listed threatened or  
5 endangered species, the certificate holder must still comply with all applicable federal laws,  
6 including laws protecting these species. The applicant provided information about compliance  
7 with the Council's Threatened and Endangered Species Standard in Exhibit Q of the ASC.

8  
9 The project order identifies the analysis area for threatened or endangered plant and wildlife  
10 species as the area within the site boundary and five miles from the site boundary. To identify  
11 species potentially occurring in the analysis area, the applicant conducted both desktop studies  
12 and field surveys. As explained in the ASC, the species identified in desktop analyses were then  
13 verified during baseline field surveys conducted on May 9 and August 1, 2013. The applicant's  
14 surveys included ground surveys for raptor nests, Washington Ground Squirrels, special status  
15 plants and wildlife, wetlands and streams, and general wildlife occurrence and habitat. The  
16 areas within the energy facility site and step-up substation site were surveyed on foot and the  
17 biologists drove along the existing transmission line ROW to verify the Oregon National Gap  
18 Analysis Program data. The applicant developed survey protocols in consultation with the  
19 Oregon Department of Fish and Wildlife to record all potential Washington Ground Squirrel  
20 burrows, as well as fresh scat, visual sightings of squirrels, and auditory calls.<sup>197</sup> Survey  
21 biologists then examined habitat within 1,000 feet of all areas within the energy facility site,

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<sup>194</sup> ORS 564.100 defines "endangered and "threatened" plant species as follows:

"Endangered Species" means:

- (a) Any plant species determined by the department to be in danger of extinction throughout any significant portion of its range
- (b) Any native plant species listed as an endangered species pursuant to the federal Endangered Species Act of 1973, as amended

"Threatened Species" means:

- (a) Any native species the director determines by a finding of fact is likely to become an endangered species within the foreseeable future throughout any significant portion of its range.
- (b) Any native plant species listed as a threatened species pursuant to the federal Endangered Species Act of 1973, as amended.

<sup>195</sup> ORS 469.004 defines "endangered" and "threatened" wildlife species as follows:

"Endangered species" means:

- (a) Any native wildlife species determined by the commission to be in danger of extinction throughout any significant portion of its range within this state.
- (b) Any native wildlife species listed as an endangered species pursuant to the federal Endangered Species Act of 1973, as amended.

"Threatened Species" means:

- (a) Any native wildlife species the commission determines is likely to become an endangered species within the foreseeable future throughout any significant portion of its range within this state.
- (b) Any native wildlife species listed as threatened species pursuant to the federal Endangered Species Act of 1973, as amended.

<sup>196</sup> These species are referred to as "state-listed" species

<sup>197</sup> ASC, Exhibit Q, pg. Q-2

1 subject to potential ground disturbance where suitable habitat or historic records of burrows  
2 exists.<sup>198</sup>

3  
4 Table Q-1, in the ASC, identifies each of the threatened and endangered species potentially  
5 present in the analysis area. As explained in the ASC, the applicant determined that there are  
6 no plant species listed as threatened or endangered under ORS 564.105(2) presented within  
7 the analysis area. Further, based upon the biological surveys conducted in the analysis area,  
8 there are no listed wildlife species or their habitat present on the station site, along the  
9 transmission line route and the step-up substation. Therefore, the applicant does not anticipate  
10 any adverse impact to any listed species.<sup>199</sup> However, each species potentially present in the  
11 analysis area is discussed in more detail below.<sup>200</sup>

### 12 13 Steelhead

14 As explained in the ASC, summer run of steelhead of the Middle Columbia River Evolutionarily  
15 Significant Unit is likely to occur within the analysis area as the Columbia River and Umatilla  
16 River are habitat for steelhead. However, as discussed the ASC, the project is not anticipated to  
17 result in adverse impacts on this species because construction and operation of the facility  
18 would not impact the Umatilla River or the Columbia River through any in-stream  
19 construction.<sup>201</sup>

### 20 21 Bull Trout

22 As explained in the ASC, bull trout can either be stream-resident and non-migratory, or  
23 migratory in cases where juvenile fish spend one to four years in their natal tributaries before  
24 migrating to a large river or lake, where they rear before returning to the tributary stream to  
25 spawn. The sections of the Columbia River and Umatilla River within the analysis are provide  
26 potential habitat for bull trout.<sup>202</sup> However, as with Steelhead, the applicant does not anticipate  
27 project related impacts to Bull Trout because the construction and operation of the facility  
28 would not impact the Umatilla River or the Columbia River through any in-stream crossings.<sup>203</sup>

### 29 30 Margined Sculpin

31 According to the ASC, the section of the Umatilla River in the analysis area provides potential  
32 habitat for margined sculpin. However, the applicant does not anticipate the facility

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<sup>198</sup> ASC, Exhibit Q, pg. Q-2.

<sup>199</sup> ASC, Exhibit Q, Q-16.

<sup>200</sup> As noted above, for the purposes of finding compliance with this standard, threatened and endangered species are those identified as such by either the Oregon Department of Agriculture or the Oregon Fish and Wildlife Commission. The Council standard addresses only those species listed as threatened or endangered by the responsible agencies in Oregon, and does not directly address federally-listed threatened or endangered species, the certificate holder must still comply with all applicable federal laws, including laws protecting these species.

<sup>201</sup> ASC, Exhibit Q, Q-5.

<sup>202</sup> ASC, Exhibit Q, Q-5

<sup>203</sup> ASC, Exhibit Q, Q-5.

1 construction or operation to impact this species, because the project would not impact the  
2 Umatilla River through any in-stream construction.<sup>204</sup>

3  
4 Pacific Lamprey

5 Adult Pacific Lamprey live in the ocean one to two years before returning to freshwater streams  
6 to spawn. As discussed in the ASC, the Columbia River and Umatilla River provide habitat for  
7 the Pacific Lamprey. However, the applicant does not anticipate the facility construction or  
8 operation to impact this species because the project would not impact the Umatilla River or the  
9 Columbia River through any in-stream construction.

10  
11 Northern Sagebrush Lizard

12 Sagebrush Lizards are active throughout much of their range from March/April to  
13 September/October and primarily occur in sagebrush and other shrubby habitat but may also  
14 be found in juniper and open areas of Ponderosa pine and Douglas fir, according to the ASC.  
15 The applicant states that some fair habitat is available for this species in the analysis area;  
16 however, there are no ORBIC records documenting its presence and the applicant's May and  
17 August, 2013 field surveys did not detect any northern sagebrush lizards.<sup>205</sup>

18  
19 Ferruginous Hawk

20 As explained in the ASC, Ferruginous Hawks breed in sagebrush plains and bunchgrass prairies  
21 of eastern Oregon. There are records of observation in the Hermiston area during the breeding  
22 season and their presence is possible in the analysis area; however, during the field surveys of  
23 2013, the applicant team did not detect any Ferruginous Hawks or their nests.<sup>206</sup> Even if they  
24 could potentially occur, the applicant does not anticipate adversely impacting this species as  
25 the applicant proposes to conduct preconstruction surveys and, if nests are discovered during  
26 those surveys, to mitigate or avoid disturbance. Further, the applicant proposes to consult with  
27 the Oregon Department of Fish and Wildlife to determine appropriate construction buffers,  
28 should active nests be discovered during the pre-construction surveys.<sup>207</sup> Condition H.8., above,  
29 requires the applicant to conduct raptor nest surveys for each year of construction, and, if nests  
30 are present, the certificate holder shall notify the department and the Oregon Department of  
31 Fish and Wildlife and construction-related activities must be restricted within 0.5 miles of  
32 Ferruginous Hawk nests until the nests have failed or chicks have fledged.

33  
34 Western Burrowing Owl

35 As discussed in the ASC, in the Columbia River Basin, Western Burrowing Owls prefer bare  
36 ground or low vegetative cover for easy detection of prey. Suitable habitat is prevalent in the  
37 analysis area, and there are documented observations of Burrowing Owls in the area.<sup>208</sup>

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<sup>204</sup> ASC, Exhibit Q, Q-6.

<sup>205</sup> ASC, Exhibit Q, Q-6.

<sup>206</sup> ASC, Exhibit Q, Q-7.

<sup>207</sup> ASC, Exhibit Q, Q-7.

<sup>208</sup> ASC, Exhibit Q, Q-7.

1 According to the ASC, Burrowing Owls are migratory breeders in Oregon, typically arriving in  
2 early March and leaving the basin before October. However, during applicant conducted field  
3 surveys, which was during the 2013 breeding season, the applicant team did not detect any  
4 Burrowing Owls or discover any burrows potentially being used by Burrowing Owls.<sup>209</sup> The  
5 applicant does not anticipate any adverse impacts on this species, unless active nests are  
6 documented in close proximity to construction activities during pre-construction surveys. In  
7 that case, the applicant proposes that those impacts could be mitigated by avoiding  
8 disturbance of any active nests.<sup>210</sup> Condition H.8, above, requires the applicant to conduct  
9 raptor nest surveys, including surveys of Burrowing Owl burrows, for each year of construction,  
10 and, if nests are present, the certificate holder must notify the department and the Oregon  
11 Department of Fish and Wildlife and construction-related activities must be restricted 0.25  
12 miles of Burrowing Owl burrows until the nests have failed or chicks have fledged.

#### 13 14 Lewis's Woodpecker

15 As explained in the ASC, Lewis's Woodpeckers are associated with open woodlands near water  
16 in Oregon. According to the applicant, the analysis area is at the edge of this species' range, and  
17 potential available habitat in the analysis area ranges from poor to good in quality based on the  
18 mapping provided by the Oregon Natural Heritage Information Center.<sup>211</sup> The nearest records  
19 of Lewis's Woodpeckers include Hat Rock State Park and Cold Springs National Wildlife Refuge.  
20 However, during applicant's 2013 field surveys, the applicant team did not detect any Lewis's  
21 Woodpeckers and the applicant does not anticipate any impact to this species because the  
22 project would not require or involve any clearing of riparian woodlands in the vicinity of these  
23 habitats.<sup>212</sup>

#### 24 25 Willow Flycatcher

26 As explained in the ASC, the analysis area includes small patches of high quality habitat for  
27 Willow Flycatchers, with the most likely locations for Willow Flycatchers in the riparian areas  
28 along the Umatilla River. However, the applicant team did not detect any Willow Flycatchers  
29 during its 2013 field surveys.<sup>213</sup> Further, the applicant does not anticipate that the project will  
30 impact the species because construction and operation of the facility does not require clearing  
31 of any suitable riparian habitat suitable for this species.<sup>214</sup>

#### 32 33 Yellow-breasted Chat

34 Yellow-breasted chat migrate and breed in Oregon, arriving in eastern Oregon in early May and  
35 departing by September. According to the ASC, small, scattered patches of fair to good habitat

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<sup>209</sup> ASC, Exhibit Q, Q-7.

<sup>210</sup> ASC, Exhibit Q, Q-7.

<sup>211</sup> ASC, Exhibit Q, Q-8.

<sup>212</sup> ASC, Exhibit Q, Q-8.

<sup>213</sup> ASC, Exhibit Q, Q-8

<sup>214</sup> ASC, Exhibit Q, Q-8.

1 occur in the analysis area but are not large enough to support a breeding population.<sup>215</sup>  
2 According to the applicant, the nearest documented occurrence was recorded in May 2009, at  
3 Cold Springs National Wildlife Refuge, which is more than 10 miles to the northeast of the  
4 station site. Further, during the applicant's 2013 field surveys, yellow-breasted chats were not  
5 detected.<sup>216</sup> The applicant does not anticipate any impact to this species as project construction  
6 and operation would not require the clearing of any suitable riparian habitat along the Umatilla  
7 River.<sup>217</sup>

#### 8 9 Tricolored Blackbird

10 As explained in the ASC, small, scattered patches of fair to good tricolored blackbird habitat  
11 occurs through the analysis area as local breeding colonies are known from marshes in the  
12 vicinity of Stanfield, Oregon and records of occurrences approximately 3 miles to the east of the  
13 project near Manns Pond.<sup>218</sup> However, tricolored blackbirds were not detected during the  
14 applicant's 2013 field surveys and the applicant does not anticipate any project impacts to this  
15 species because construction and operation of the project does not require the clearing of any  
16 suitable marshy habitats, in the vicinity of these habitats, during construction or operation.

#### 17 18 Small-footed Myotis

19 As stated in the ASC, fair quality habitat and minimal high quality habitat of Small-footed  
20 Myotis are predicted throughout the analysis area; however, there are no documented records  
21 of this bat species. The applicant explains that the species roosts in buildings, on cliffs, in caves,  
22 under boulders and sometimes beneath tree bark. As discussed in the ASC, these bats could be  
23 disturbed by construction related activities if active roosts occur in close proximity; however,  
24 the applicant does not anticipate any project related impacts to this species because  
25 construction is not planned in close proximity to suitable man-made or rocky structures that  
26 could provide roost sites. Further, any cleared suitable habitat is anticipated to consist of  
27 isolated patches too small to support Small-footed Myotis.

#### 28 29 Long-eared Myotis

30 Long-eared Myotis are primarily associated with woodlands and forest edges and may also  
31 occur in arid shrublands if suitable roosting sites are available. Loss of habitat may impact local  
32 breeding populations, however, as explained in the ASC, the woodlands preferred by the Long-  
33 eared Myotis are not present in the analysis area and construction is not planned to occur in  
34 close proximity to suitable man-made or rocky structures that could provide roost sites.  
35 Therefore, the applicant does not anticipate any adverse impacts to this bat species from  
36 project construction or operation.<sup>219</sup>

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<sup>215</sup> ASC, Exhibit Q, Q-8

<sup>216</sup> ASC, Exhibit Q, Q-8.

<sup>217</sup> ASC, Exhibit Q, Q-8.

<sup>218</sup> ASC, Exhibit Q, Q-9.

<sup>219</sup> ASC, Exhibit Q, Q-9.

1 Long-legged Myotis

2 Typically, the Long-legged Myotis are associated with coniferous forests; however, in drier  
3 areas, like the analysis area, they occur in riparian woodlands. The northern edge of the  
4 analysis area is composed of fair habitat of this bat species, limited to the riparian woodlands  
5 near the Umatilla and Columbia Rivers. As stated by the applicant, there are no documented  
6 records of the species in the analysis area. The applicant does not anticipate any adverse  
7 impacts to this species as the construction of the facility will not clear any valuable habitat for  
8 this species and is not planned in close proximity to suitable man-made or rocky structures that  
9 could provide roost sites.<sup>220</sup>

10  
11 Yuma Myotis

12 As stated in the ASC, there are no documented records of the Yuma Myotis in the analysis area  
13 or in Umatilla County, and the analysis area lacks heavily wooded streamside areas where this  
14 bat species predominantly feeds over water with forested borders.<sup>221</sup> The applicant does not  
15 anticipate project related impacts to this species as the facility does not require the clearing of  
16 any valuable wooded habitat along streams, nor will it remove any existing buildings or bridges  
17 that could be roost sites.<sup>222</sup>

18  
19 Pallid Bat

20 Pallid Bats are associated with a variety of arid vegetation types and they roost in buildings,  
21 mines, cliff faces and caves. The ASC states that fair habitat for this species exists, scattered  
22 throughout the analysis area, including the Umatilla Army Depot; however, there are no  
23 documented records of the species in the analysis area.<sup>223</sup> The applicant does not anticipate  
24 adverse impacts to this species because construction is not planned in close proximity to  
25 suitable man-made or rocky structures and any cleared shrub habitat is expected to be too  
26 small to support Pallid Bats.

27  
28 Washington Ground Squirrels

29 As explained in the ASC, there are records of Washington Ground Squirrels within the analysis  
30 area, specifically, south of the southern terminus of the project and east of the McNary  
31 Substation. The applicant's 2013 field surveys did not detect the presence of Washington  
32 Ground Squirrels or any large patches of quality habitat within or directly adjacent to the step-  
33 up substation site and 50-foot right of way gas pipeline right of way. The applicant proposes to  
34 implement measures to avoid and/or minimize impacts on Washington Ground Squirrels during  
35 and after construction, including conducting pre-construction surveys and restricting  
36 construction activities, if need be. Therefore, the applicant does not anticipate any impacts to  
37 this species.

38  

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<sup>220</sup> ASC, Exhibit Q, Q-10.

<sup>221</sup> ASC, Exhibit Q, Q-10.

<sup>222</sup> Id.

<sup>223</sup> ASC, Exhibit Q, Q-11.

1 Robinson's Onion

2 Robinson's Onion is a small plant that grows in well-drained sandy and gravelly soils along  
3 rivers. The perennial blooms from April through May. As explained in the ASC, the plant was  
4 historically known from Morrow, Sherman and Umatilla counties. However, it is considered  
5 possibly extirpated from Oregon and 2013 field surveys did not record the presence of the plant  
6 nor any well-drained gravelly soils in the canals crossed by the natural gas pipeline.<sup>224</sup> The  
7 Oregon Department of Agriculture concurred with the applicant's findings that the area does  
8 not include suitable habitat for the species as well as the lack of the species in the area.  
9 Regardless, the project will not impact the shoreline of the Umatilla River or Columbia River;  
10 therefore, no impacts to this plant are expected.<sup>225</sup>

11  
12 Laurence's Milkvetch

13 Laurence's Milkvetch is a federal species of concern and a State of Oregon listed threatened  
14 species. As explained in the ASC, there are currently fewer than 2,000 plants in existence and  
15 no known population sites are considered protected. However, the applicant's 2013 field  
16 surveys found the energy facility site to be relatively flat and absent of the dry slopes where  
17 Laurence's milkvetch is commonly found. Further, the surveys noted that the majority of the  
18 surveyed area was agricultural and heavily degraded; therefore, the site does not provide  
19 suitable habitat for these species and no plants were found during surveys. The Oregon  
20 Department of Agriculture concurred with these findings. Consequently, the applicant does not  
21 anticipate any adverse impacts to this species from construction and operation of the  
22 project.<sup>226</sup>

23  
24 While the applicant does not anticipate any adverse impacts to any of these listed species  
25 because of the lack of the species at the site or the lack of impacts to the species' habitat, the  
26 analysis area does include fair to good habitat for the identified species and there is a possibility  
27 of species occurrence. Therefore, the Council adopts the following conditions to ensure that at  
28 the time of construction there are no adverse impacts to any of the species:

29  
30 **Condition I.1:** The certificate holder shall establish streamside management zones within 50  
31 feet of both sides of intermittent and perennial streams and along margins of bodies of  
32 open water where removal of low-lying vegetation is minimized.

33  
34 **Condition I.2:** Prior to beginning construction, the site certificate holder shall survey for  
35 northern sagebrush lizard in areas of sagebrush and other shrubby habitat to be impacted  
36 by ground disturbing activities. If northern sagebrush lizards are discovered, the site  
37 certificate holder shall contact and consult Oregon Department of Fish and Wildlife (ODFW)  
38 and the department to determine appropriate measures to avoid or minimize adverse

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<sup>224</sup> ASC, Exhibit Q, Q-11.

<sup>225</sup> ASC, Exhibit Q, Q-12.

<sup>226</sup> ASC, Exhibit Q, Q-12.

1 effects, including spatial restrictions. Construction activities shall be restricted until  
2 consultation with ODFW has occurred.

3  
4 **Condition I.3:** Prior to beginning construction, the site certificate holder shall examine any  
5 structures within the construction corridor for bat roosts. If any bat roosts are discovered,  
6 construction shall be restricted and the site certificate holder shall consult with Oregon  
7 Department of Fish and Wildlife and the department to determine appropriate measures to  
8 avoid and/or minimize adverse effects.

9  
10 **Condition I.4:** Prior to beginning construction, the site certificate holder shall conduct pre-  
11 construction surveys for Washington Ground Squirrels (WGS) in any areas with suitable  
12 habitat, using a qualified professional biologist that has experience in detection of WGS. The  
13 certificate holder shall provide written reports of the surveys to the department and the  
14 Oregon Department of Fish and Wildlife (ODFW). If any project components that require  
15 ground disturbance are located within 1,000 feet of potential WGS habitat (excluding tilled  
16 agricultural land or developed areas as it is not suitable for WGS foraging or burrowing), the  
17 site certificate holder shall conduct transect surveys to determine if squirrels are present. If  
18 WGS are present within the 1,000 foot-buffer, the certificate holder shall identify the  
19 boundaries of the Category 1 WGS habitat in the report to the department and ODFW and  
20 construction shall be restricted until appropriate measures are determined, which shall  
21 include but not be limited to WGS habitat marking with high visibility flagging or makers.

22  
23 **Condition I.5:** The site certificate holder shall conduct pre-construction surveys for  
24 Robinson's onion and Laurence's milkvetch prior to conducting any ground-disturbing  
25 activities in areas with suitable habitat. If any plants are discovered, the site certificate  
26 holder shall consult with the Oregon Department of Agriculture and the department for  
27 guidance on appropriate measures to avoid or minimize adverse effects.

## 28 29 **Monitoring**

30  
31 The applicant proposes to implement the project Biological Monitoring Plan, which provides  
32 goals, methods and criteria for the site certificate holder to track the successes of mitigation  
33 measures designed to avoid or minimize impacts on plants and wildlife and their habitats. This  
34 plan is attached and is adopted pursuant to Condition H.4, above.

35  
36 Based on the foregoing findings of fact, and subject to compliance with the site certificate  
37 conditions, the Council finds that the design, construction and operation of the facility, will not  
38 significantly reduce the likelihood of the survival or recovery of any threatened or endangered  
39 plant or wildlife species listed under Oregon law.

## 40 41 **IV.I.2. Threatened and Endangered Species: Conclusions of Law**



Based on the foregoing findings and the evidence in the record, and subject to compliance with the site certificate conditions, the Council finds that the facility complies with the Council's Threatened and Endangered Species Standard.

#### **IV.J. Scenic Resources [OAR 345-022-0080]**

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

*(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 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.*

##### **IV.J.1. Scenic Resources: Findings of Fact**

OAR 345-022-0080 requires that the Council determine that the design, construction, and operation of the proposed Facility will not have a "significant adverse impact" on any significant or important scenic resources and values in the analysis area.

The proposed facility is not a special criteria facility under OAR 345-015-0310; therefore OAR 345-022-0080(2) is not applicable.

OAR 345-001-0010(53) defines 'significant' as:

*(53) "Significant" means having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resources affected, considering the context of the action or impact, its intensity, and the degree to which possible impacts are caused by the proposed action. Nothing in this definition is intended to require a statistical analysis of the magnitude or likelihood of a particular impact.*

The applicant provided evidence about potential impacts to scenic resources in Exhibit R of the application. The analysis area for the Scenic Resources standard is the area within the site boundary and 10 miles surrounding the site boundary.

##### **A. Visual Features of the Site and Proposed Facility**

1  
2 The energy facility site would occupy approximately 20 acres and would be constructed on a  
3 flat, open field adjacent to and just north of the existing Hermiston Generating Plant. According  
4 to the ASC, visible features of the Station would consist of a complex of large metal structures,  
5 including four combustion turbine generator structures; four exhaust stacks; a mechanical draft  
6 cooling tower; a water treatment building and water tanks; a control and administration  
7 building; generators and auxiliary transformers; and a 230-kV switchyard. Another potentially  
8 visible feature could be the zero liquid discharge system if the facility is unable to send  
9 reclaimed water to the Hermiston Generating Plant. In addition, the facility would include a  
10 natural gas-lateral pipeline, which would be underground within an existing right of way, but  
11 would connect to an aboveground metering station and a step-up substation.<sup>227</sup> The applicant  
12 also proposes to reconductor an existing transmission line; however, with the exception of six  
13 new poles (worst-case scenario), the reconducted line would use the existing steel monopole  
14 transmission structures. For the new poles, the applicant has proposed to use poles similar in  
15 height and appearance to the existing poles within the transmission line ROW.<sup>228</sup> The tallest  
16 structures associated with the proposed facility are the 90-foot emission stacks at the energy  
17 facility site and the 20-foot tall step-up substation.<sup>229</sup>

#### 18 19 B. Identification of Scenic Resources and Values

20  
21 In order to determine compliance with the Scenic Resources Standard, the Council must  
22 determine whether any of the land management plans in effect within the analysis area identify  
23 'significant' or 'important' scenic resources or values. The Council must then determine  
24 whether the proposed facility would result in a significant adverse impact to an identified  
25 'significant' or 'important' scenic resources and values. In Exhibit R, the applicant provided a  
26 list of local, state, and federal land use and management plans pertaining to the 10-mile  
27 analysis area for scenic resources.<sup>230</sup> The applicant reviewed the federal McNary Shoreline  
28 Management Plan prepared by the U.S. Army Corps of Engineers; however, no other federal or  
29 tribal plans addressing scenic or aesthetic resources were identified.<sup>231</sup> In addition to the  
30 federal management plan, the applicant reviewed the following local plans: Umatilla County  
31 Comprehensive Plan, Umatilla County Comprehensive Plan Technical Report, City of Umatilla

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<sup>227</sup> ASC, Exhibit R, R-3.

<sup>228</sup> ASC, Exhibit R, R-3.

<sup>229</sup> ASC, Exhibit R, R-3.

<sup>230</sup> ASC, Exhibit R, R-5.

<sup>231</sup> The City of Hermiston, the City of Stanfield, and the City of Echo are all included within the analysis area. Based upon a review of each comprehensive plan, no areas have been identified as an important or significant scenic resources within any of their comprehensive plans. Therefore, there are no important or significant scenic resources identified in these local plans that necessitate further consideration in this exhibit. See City of Echo Comprehensive Plan, City of Hermiston Comprehensive Plan, City of Stanfield Comprehensive Plan,

1 Comprehensive Plan, and the Morrow County Comprehensive Plan.<sup>232</sup> Each of the identified  
2 plans is discussed below.

#### 3 4 McNary Shoreline Management Plan

5 The McNary Shoreline Management Plan was prepared by the Corps with a stated objective to  
6 “achieve a balance between permitted private uses and resource protection for general public  
7 use. Management of the shoreline will provide recreation opportunities, while protecting fish  
8 and wildlife habitat, cultural resources, and the natural environment as a whole.”<sup>233</sup> As stated in  
9 the ASC, the plan does not identify or describe any significant or important scenic resources.  
10 The plan does, however, identify protected shorelines. As explained in the plan, the protected  
11 shore line areas are those areas that have been set aside to maintain or restore fish and wildlife  
12 habitat, cultural, aesthetic, or other environmental values. However, as discussed in the ASC,  
13 the facility would not cross or be visible from any protected shoreline because of intervening  
14 topography, vegetation and structures. The nearest protected shoreline area to the energy  
15 facility site is located more than 10 miles north and approximately 3 miles east of the new step-  
16 up substation. As detailed in the ASC, intervening topography, including bluffs along the river  
17 edge and several low ridges, would prevent direct line-of-sight to the project from the  
18 shorelines. Further, tall trees and various large structures would be located between the  
19 protected shoreline areas and the project that would further screen views. Therefore,  
20 combined with the distances between the facility and the shoreline areas, views of the project  
21 from the protected shorelines would be obscured.<sup>234</sup>

#### 22 23 Umatilla County Comprehensive Plan and Technical Report

24 Chapter 8 of the Umatilla County Comprehensive Plan addresses “Open spaces, Scenic and  
25 Historic Areas, and Natural Resources.”<sup>235</sup> Finding No. 20 of Chapter 8 states that “Umatilla  
26 County has a number of outstanding scenic views and pleasant vistas.”<sup>236</sup> In response to the  
27 finding, Policy No. 20 generally addresses the need to mitigate adverse visual impacts of  
28 development and limit scenic and aesthetic conflicts. Subsection (e) of Policy 20 states that the  
29 Wallula Gap has been recognized as a significant scenic area. Therefore, Wallula Gap is a  
30 significant scenic resource in Umatilla County; however, it is located outside the analysis area  
31 and, therefore, not further addressed.

32  
33 The Umatilla County Comprehensive Plan Technical Report states that “certain developments  
34 or occurrences may conflict with scenic values. Industrial plants and energy facilities may create  
35 their own offensive scenic feature or obscure a natural scene.... Scenically offensive

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<sup>232</sup> ASC, Exhibit R, R-5.

<sup>233</sup> ASC, Exhibit R, R-5.

<sup>234</sup> ASC Exhibit R, R-6.

<sup>235</sup> Chapter 8 of the Umatilla County Comprehensive plan addresses Goal 5 of the statewide planning goals, which is “to conserve open space and protect natural and scenic resources.”

<sup>236</sup> Umatilla County Comprehensive Plan, page 8-9. See Finding No. 20 and related Policy No. 20. Items (c), (d) and (e) of Policy No. 20 were not included in the application because the specific sites identified are not applicable to the project.

development may ameliorate its effect by careful design, strategic placement of structures, and landscaping.”<sup>237</sup> Table D-XVII of the Technical Report lists “Outstanding Sites and Views” in Umatilla County, and, as applicable to this review, identifies McNary Dam, Lake Wallula, and Lake Umatilla as areas enjoyed for and developed, at least partially, for scenic value. Umatilla River downstream from State Highway 207 is also included in the table as an ‘outstanding site and view’ but it is not noted as being enjoyed or developed for scenic value, according to the Table.<sup>238</sup> As explained in the ASC, the McNary Dam and Lake Wallula are located approximately 1 mile northeast of the McNary substation and new step-up substation site.<sup>239</sup> The Umatilla River downstream from State Highway 207 meanders through mostly private lands consisting of agricultural, industrial and scattered low-density residential lands. The only developed public access area along the river corridor between State highway 207 and the Columbia River is Riverfront Park in Hermiston about 2.9 miles northeast of the Station.<sup>240</sup> The applicant does not anticipate the facility to be easily visible or noticeable in views from the McNary Dam or Lake Wallula areas because of the distance between the energy facility site and the transmission line, in addition to the intervening structures, terrain and vegetation. The applicant further states that views of the step-up substation from these features would be screened by the larger McNary substation and intervening topography.<sup>241</sup> The applicant explains that the Station would also be screened from views of the Riverfront Park by larger buildings and the Hermiston Generating Plant as well as low bluffs and tall trees along the river corridor and therefore there would be no impact.<sup>242</sup> Further, views of the step-up substation from the Umatilla River downstream of State Highway 207, would be largely obscured by I-82 and the surrounding industrial development.<sup>243</sup>

#### The City of Umatilla and Morrow County

Neither the City of Umatilla nor Morrow County Plans include any goals, policies, or inventories identifying or protecting any specific scenic areas. The City of Umatilla Comprehensive Plan identifies a section concerning Scenic Areas, however, it is identified as “reserved for expansion.” The Morrow County Comprehensive Plan identifies the importance of protecting open lands for their “aesthetic aspects to all of the people.” However, it further states that, while Morrow County contains a variety of landscapes, many of which may be considered to be scenic, the county has not designated any sites or areas as being particularly high in scenic-resources value. Therefore, no scenic resources were addressed or identified in the plan. <sup>244</sup>

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<sup>237</sup> ASC, Exhibit R, R-7.

<sup>238</sup> It is worth noting that the Umatilla County Court, in its report on the complete application, stated that there are no inventoried Goal 5 significant visual resources in the vicinity of the project site.

<sup>239</sup> ASC, Exhibit R, R-7.

<sup>240</sup> ASC, Exhibit R, R-7.

<sup>241</sup> ASC, Exhibit R, R-9.

<sup>242</sup> ASC, Exhibit R, R-7.

<sup>243</sup> ASC, Exhibit R, R-10.

<sup>244</sup> ASC, Exhibit R, R-8.

1 Based upon the information provided, the Council finds that there are no significant or  
2 important scenic resources or values located within the analysis area.

### 3 4 C. Analysis of Impacts of the Proposed Facility 5

6 The applicant conducted an analysis to determine whether any scenic or aesthetic resources  
7 within a 10-mile radius of the proposed facility would be affected by the facility. The analysis  
8 performed by the applicant included the following steps:  
9

- 10 1. Reviewing documentation for applicable federal, tribal, state, and local planning
- 11 policies;
- 12 2. Reviewing the site plans, aerial photographs, and maps of the area surrounding the
- 13 project;
- 14 3. Nominating potential Key Observation Points from site plans, aerial photographs, and
- 15 maps;
- 16 4. Evaluating and photographing Key Observation Points in the field;
- 17 5. Assessing visual sensitivity of the Key Observation Points based on the types of users,
- 18 the amount of use, the amount of public interest and the adjacent land uses;
- 19 6. Determining the scenic quality based on landform, vegetation, water, color, adjacent
- 20 scenery, scarcity of the scenic resource, and existing cultural modifications; and
- 21 7. Identifying opportunities for mitigation of any impacts that may be caused by
- 22 construction or operation of the facility.
- 23

24 As explained in the ASC, the applicant's analysis was based largely on the Federal Highway  
25 Administration System for Visual Impact Assessment for Highway Projects. The applicant  
26 selected this analysis because it is widely used and, according to the applicant, is a defensible  
27 process for visual impact assessment and applicable for use in a broad range of landscape  
28 types, including urban and other developed lands, rural and agricultural lands, and natural  
29 areas.<sup>245</sup>  
30

31 The Station would be built in a portion of an agricultural field that contains little to no native  
32 vegetation; therefore, construction and operation of the facility would not result in a  
33 substantial loss of vegetation.<sup>246</sup> As explained in the ASC, once built, the most prominent visible  
34 feature would be the four vertical 90-foot tall exhaust stacks, which would contrast strongly  
35 with the generally flat landscape of the sagebrush shrub/scrub and agricultural lands. However,  
36 as the ASC explains, the industrial elements of the facility would be similar to the adjacent  
37 Hermiston Generating Plant located just north of the Station. Moreover, a number of other  
38 industrial buildings and vertical transmission structures are located in close proximity to the site  
39 that contrast with the flat, agricultural landscape character. Therefore, while the energy facility  
40 would be visible from a variety of locations in the vicinity, the applicant asserts that it would be

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<sup>245</sup> ASC, Exhibit R, R-9.

<sup>246</sup> ASC, Exhibit R, R-14.

1 similar in form, line, color, texture and scale to other nearby existing features and,  
2 consequently, would not substantially alter the existing industrial characteristic of the area or  
3 reduce the vividness, intactness or unity of views from locations in the surrounding area.<sup>247</sup>  
4 However, because of its visibility, in order to minimize the potential visual impacts from the  
5 facility on the identified scenic resources, the Council adopts the following condition:

6  
7 **Condition J.1:** The certificate holder shall paint or otherwise finish the facility structures in  
8 neutral colors with a low reflectivity finish to provide visual integration with the  
9 surrounding landscape.

10  
11 In addition to structures, the energy facility site would also emit water vapor plumes from the  
12 cooling tower and exhaust stacks that would occasionally be visible in the surrounding area.<sup>248</sup>  
13 As explained in the ASC, plumes up to 200 meters long would be visible less than 50 percent of  
14 the time and plumes up to 500 meters long would be visible no more than 20 percent of the  
15 time on an annual basis. The period of maximum visible plume formation would be during  
16 clear, cold and calm days.<sup>249</sup> Vapor plumes from the Station would be generally visible during  
17 the same time periods and under the same weather conditions as those plumes emanating  
18 from the neighboring HGP; however, the applicant anticipates the plumes from the Station to  
19 occur less frequently and to be smaller in size because the proposed facility is a peaker plant,  
20 and as such would operate intermittently and less often.<sup>250</sup> Therefore, as stated in the ASC,  
21 while the proposed energy facility would increase the number and add somewhat to the  
22 visibility of plumes in the area, the plumes would not introduce a new element of contrast or  
23 substantially increase the presence of plumes in the landscape because the plumes would occur  
24 coincidentally with the larger plumes emanating from HGP. However, lighting of the station  
25 would increase the visibility of the facility structures and the visibility of the plumes during dark  
26 hours. Therefore, the Council adopts the following condition to restrict nighttime lighting.

27  
28 **Condition J.2:** The certificate holder shall not use exterior nighttime lighting except:

- 29  
30 1. The minimum exhaust stack lighting required or recommended by the Federal  
31 Aviation Administration;  
32 2. Safety and security lighting at the Station and step-up substation, provided that such  
33 lighting is shielded or downward directed to reduce offsite glare; and  
34 3. Minimum lighting necessary for repairs or emergencies.

35  
36 Subject to this condition, and based upon the evidence that the proposed facility's plume would  
37 not introduce a new element of contrast and would be smaller in size than the current plume,

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<sup>247</sup> ASC, Exhibit R, R-15.

<sup>248</sup> ASC, Exhibit R, R-15.

<sup>249</sup> ASC, Exhibit R, R-15.

<sup>250</sup> ASC, Exhibit R, R-15.

1 the Council finds that the visual impacts of the visible vapor plume would not be substantial  
2 and certainly less than significant to identified scenic resources and values.<sup>251</sup>

3  
4 Regarding visual impacts of the transmission line, as explained in the ASC, reconductoring of  
5 the existing transmission line would not result in a substantial loss of vegetation and views of  
6 the landscape would not be noticeably altered because the existing structures would remain in  
7 place, with up to six new poles added in the worst case scenario. Further, for the new poles, the  
8 applicant has proposed to use poles similar in height and appearance to the existing poles  
9 within the transmission line ROW. Therefore, the applicant found visual impacts from the  
10 proposed transmission line to be negligible to low.<sup>252</sup> However, to ensure that the visual  
11 impacts associated with the new poles are in fact negligible, the Council adopts the following  
12 condition that requires the applicant to use poles of similar height and appearance, which  
13 would allow for the new poles to blend with the existing transmission line infrastructure and  
14 not drastically alter the landscape:

15  
16 **Condition J.3:** For the new poles required for the transmission infrastructure, the certificate  
17 holder shall use poles similar in height and appearance to the existing poles within the  
18 transmission line right-of-way.

19  
20 Considering the majority of the transmission line infrastructure is in existence and, subject to  
21 compliance with the site certificate condition, the Council finds that visual impacts of the  
22 transmission line would be less than significant to any scenic resources in the area.

23  
24 The new step-up substation would be located 250 feet south of the McNary Substation.  
25 Construction of the step-up substation would result in a loss of vegetation on the undeveloped  
26 parcel; however, as explained in the ASC, existing vegetation is sparse and mostly weedy.  
27 Therefore, construction of the substation would not result in the loss of vegetation that  
28 contributes substantially to the visual quality of the area.<sup>253</sup> As explained in the ASC, the tallest  
29 structure in the step-up substation would be at or below 20 feet and lower than those of  
30 existing structures at the McNary Substation. Therefore, according to the applicant, the  
31 construction of the substation would not contrast strongly with the existing elements in view  
32 and the low vividness, intactness and unity of views in the area would not be substantially  
33 degraded.<sup>254</sup> Nonetheless, the step-up substation would be visible from rural residences.  
34 Therefore, the Council adopts Condition J.1., above, which requires the certificate holder to  
35 paint and finish all facility structures with neutral colors and in a manner that provides visual  
36 integration with the surrounding landscape and features. Subject to compliance with this  
37 condition, the Council finds that the proposed step-up substation would not result in a  
38 significant adverse impact to identified scenic resources and values.

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<sup>251</sup> ASC, Exhibit R, R-16.

<sup>252</sup> ASC, Exhibit R, R-16.

<sup>253</sup> ASC, Exhibit R, R-17.

<sup>254</sup> ASC, Exhibit R, R-17.

1  
2 Based on the evidence in the record and this analysis, the Council finds that the design,  
3 construction and operation of the facility, are not likely to result in significant adverse impacts  
4 to scenic resources and values identified as significant or important in local land use plans for  
5 federal land management plans.

6  
7 IV.J.2. Scenic Resources: Conclusions of Law  
8

9 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
10 the site certificate conditions, the Council finds that the facility complies with the Council's  
11 Scenic Resources Standard.

12  
13 IV.K. Historic, Cultural and Archaeological Resources [OAR 345-022-0090]  
14

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

18  
19 *(a) Historic, cultural or archaeological resources that have been listed on, or would*  
20 *likely be listed on the National Register of Historic Places;*

21  
22 *(b) For a facility on private land, archaeological objects, as defined in ORS*  
23 *358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*

24  
25 *(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c),*  
26

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

31 \* \* \*

32  
33 IV.K.1. Historic, Cultural, and Archaeological Resources: Findings of Fact  
34

35 OAR 345-022-0090 requires the Council to find that, taking into account mitigation, the  
36 construction and operation of the proposed facility is not likely to have a significant adverse  
37 impact on historic, cultural, or archaeological resources, archaeological objects and  
38 archaeological sites specified in OAR 345-022-0090(1). OAR 345-022-0090(2) and (3) do not  
39 apply to this application because the proposed facility would not produce power from wind,  
40 solar or geothermal energy and the facility is not a special criteria facility as defined in OAR 345-  
41 015-0310. Therefore, only the standards in OAR 345-022-0020(1)(a) through (c) apply to the  
42 proposed facility. The applicant provided information regarding historic, cultural and



1 archaeological resources in Exhibit S of the application.<sup>255</sup> The project order identifies the  
2 analysis area as all areas within the site boundary. According to the ASC, the analysis area is  
3 located almost entirely on private lands, with the exception of the step-up substation, which is  
4 located on lands managed by BPA and the underground transmission line, which is located on  
5 lands managed by the U.S. Army Corps of Engineers.<sup>256</sup>

6  
7 To identify historic, cultural and archaeological resources within the analysis area, the applicant  
8 conducted a records review followed by a field survey. The records review included the area  
9 within and near the analysis area; the field surveys were conducted within portions of the  
10 analysis area that were accessible and not previously surveyed for cultural resources.<sup>257</sup> At the  
11 direction of SHPO, the applicant did not resurvey for cultural resources in areas where there  
12 was not planned ground disturbance and where previous cultural resource surveys had been  
13 conducted that met the current standards and did not identify cultural resources.<sup>258</sup>  
14 Additionally, two small portions of agricultural fields with crops and a section of the natural gas  
15 pipeline ROW located on the west side of Cottonwood Bend Road were not surveyed due to the  
16 standing crops on the fields and permission access issues with the pipeline ROW. Pedestrian  
17 surveys and shovel testing was conducted on December 19 through January 21, 2012; January 3  
18 and 4, 2013; and July 10 through 12, 2013. As explained in the ASC, the archaeological  
19 pedestrian surveys were performed by professional archaeologists walking parallel transects  
20 spaced up to 15 meters apart, in conformance with the Oregon SHPO standards and  
21 guidelines.<sup>259</sup> The applicant conducted shovel testing within portions of the analysis area where  
22 ground visibility was poor and that were determined to have a high probability for containing  
23 cultural resources. As stated in the ASC, a total of 33 shovel test were excavated within the  
24 analysis area.<sup>260</sup> If a shovel test detected an artifact, additional shovel tests were excavated in  
25 the four cardinal directions at a distance of 5 meters to determine whether the resources were  
26 isolated finds or archaeological sites.

27  
28 Within the analysis area, the applicant identified eight historic-period structures, five of which  
29 are considered resources eligible for listing in the National Register of Historic Places under OAR  
30 345-022-0090(1)(a) because they are associated with events that have made a significant  
31 contribution to the broad patterns of the area's history.<sup>261</sup> Those five structures include  
32 Westland Irrigation District Canals, West Extension Irrigations Canals, Union Pacific Railroad

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<sup>255</sup> Pursuant to OAR 345-021-0010(1)(s), information concerning the location of historic, cultural and archaeological resources and/or objects may be exempt from public disclosure under ORS 192.502(4) or 192.501(11). Therefore, the applicant submitted a cultural resource report, designated Attachment S to Exhibit S, which includes confidentially submitted maps.

<sup>256</sup> ASC, Exhibit S, S-3.

<sup>257</sup> ASC, Exhibit S, S-1

<sup>258</sup> ASC, Exhibit S, S-4.

<sup>259</sup> ASC, Exhibit S, S-4.

<sup>260</sup> ASC, Exhibit S, S-4.

<sup>261</sup> ASC, Exhibit S, S-1.

1 Messner-Hinkle Segment, Bonneville Power Administration McNary-Boardman No. 1  
2 Transmission Line, and BPA McNary-Coyote Springs No. 1 Transmission Line.

3  
4 The applicant found one archaeological resource on private land that fits within the definition  
5 of archaeological object under ORS 358.905(1)(a). No archaeological sites were identified.<sup>262</sup>  
6 Further, the applicant did not locate any archaeological objects or sites on public lands within  
7 the analysis area.

8  
9 A. Impacts

10  
11 To avoid impacts to the five identified NRHP-eligible historic period resources, the applicant  
12 proposes to coordinate with the owners/operators of each resource, prior to construction, to  
13 obtain any necessary easements or approvals. Further, the applicant proposes to prevent  
14 impacts to the NRHP-eligible transmission lines by avoiding the existing facilities by means of  
15 either passing underneath or passing around them. Similar to the eligible transmission lines, the  
16 applicant proposes to cross the railroad alignment and two canals by excavating under the  
17 railroad and boring under the canals. If boring underneath the canal is not possible, the  
18 applicant proposes to trench through the canal with restoration of the original alignment,  
19 construction materials and design to follow.<sup>263</sup> Based upon the applicant's proposal to avoid  
20 impacts, and to ensure compliance with the requirement to avoid resources eligible for listing  
21 on the National Register of Historic Places, the Council adopts the following condition:

22  
23 **Condition K.1:** Prior to construction, the certificate holder shall contact and coordinate with  
24 each owner/operator of the identified NRHP eligible historic period resources to obtain any  
25 necessary easements or approvals. The certificate holder shall ensure that a qualified  
26 archaeologist, as defined in OAR 736-051-0070, instructs construction personnel in the  
27 identification and avoidance of accidental damage to identified resources. Records of such  
28 training shall be maintained at the administration/control building and made available to  
29 authorized representatives of the department upon request.

30  
31 **Condition K.2:** Before beginning construction, the certificate holder shall provide to the  
32 department a map showing the final design locations of all components of the facility, the  
33 areas that would be temporarily disturbed during construction and the areas that were  
34 surveyed in 2013.

35  
36 Based upon the above information and subject to compliance with the site certificate  
37 conditions, the Council finds that the construction and operation of the facility are not likely to  
38 result in significant adverse impacts to historic or cultural resources described in OAR 345-022-  
39 0090(1)(a) through (c).

40  

---

<sup>262</sup> ASC, Exhibit S, S-1.

<sup>263</sup> ASC, Exhibit S, S-7.

1 However, as discussed in the ASC, some ground disturbing activities associated with  
2 construction of the facility have the potential to reveal historic or cultural resources not  
3 identified previously. In order to avoid potential impacts to later-discovered resources, the  
4 Council adopts the following condition:

5  
6 **Condition K.3:** The certificate holder shall cease all ground disturbing activities in the  
7 immediate area if any archaeological or cultural resources are found during construction of  
8 the facility. The certificate holder shall flag or mark the area and shall notify the department  
9 and the Oregon State Historic Preservation Office (SHPO) of the find. A qualified  
10 archaeologist shall evaluate the significance of the find. If SHPO determines that the  
11 resource is significant, the certificate holder shall make recommendations to the Council for  
12 mitigation, including avoidance, field documentation, and data recovery, in consultation  
13 with the department, SHPO, interested tribes and other impacted parties. The certificate  
14 holder shall not restart work in the affected area until the certificate holder has  
15 demonstrated to the Council that it has complied with the archaeological resource  
16 protection regulations.

17  
18 Further, as noted in the ASC, three sections within the analysis area were not surveyed. To  
19 ensure compliance with the Council's standard and no impact to a cultural resource, the Council  
20 adopts the following condition which requires the applicant to survey areas not previously  
21 surveyed:

22  
23 **Condition K.4:** The certificate holder must employ qualified personnel to conduct field  
24 investigations of the section of the project's natural gas pipeline right of way not previously  
25 surveyed, prior to construction in that area. The certificate holder shall provide a written  
26 report of the field investigation to the department and Oregon State Historic Preservation  
27 Office (SHPO). If potentially significant historic, cultural or archaeological sites are found  
28 during the field investigations, the certificate holder must instruct all construction  
29 personnel to avoid the identified sites and must implement appropriate measures to  
30 protect the site, including the measures described in Condition K.3.

31  
32 Based on the foregoing, the Council finds that the construction and operation of the facility are  
33 not likely to result in significant adverse impacts to historic, cultural, or archaeological  
34 resources.

35  
36 **IV.K.2. Historic, Cultural, and Archaeological Resources: Conclusions of Law**

37  
38 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
39 the site certificate conditions, the Council finds that the facility complies with the Council's  
40 Historic, Cultural, and Archaeological Resources Standard.

1 **IV.L. Recreation [OAR 345-022-0100]**

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

9  
10 *(a) Any special designation or management of the location;*

11  
12 *(b) The degree of demand;*

13  
14 *(c) Outstanding or unusual qualities;*

15  
16 *(d) Availability or rareness;*

17  
18 *(e) Irreplaceability or irretrievability of the opportunity.*

19 \* \* \*

20  
21 **IV.L.1. Recreation: Findings of Fact**

22  
23 The Recreation Standard requires the Council to find that the design, construction and  
24 operation of the facility are not likely to result in significant adverse impacts to ‘important’  
25 recreational opportunities. Therefore, the Council’s Recreation Standard applies to only those  
26 recreation areas that the Council finds “important”, based on the factors listed in the sub-  
27 paragraphs of section (1) of the standard. Because the proposed facility is not a special criteria  
28 facility under OAR 345-015-0310, OAR 345-022-0100(2) does not apply to the proposed facility.  
29 The applicant provides evidence about potential impacts to important recreation opportunities  
30 in Exhibit T of the ASC. The project order identified the analysis area for the Recreation  
31 Standard as the area within the site boundary and five miles from the site boundary.

32  
33 OAR 345-022-0100 requires the Council to determine that the design, construction and  
34 operation of the proposed facility will not have a significant adverse impact to any recreational  
35 opportunities in the analysis area. OAR 345-001-0010(53) defines “significant” as

36  
37 “having an important consequence, either alone or in combination with other factors, based  
38 upon the magnitude and likelihood of the impact on the affected human population or  
39 natural resources, or on the importance of the natural resources affected, considering the  
40 context of the action or impact, its intensity and the degree to which possible impacts are  
41 caused by the proposed action. Nothing in this definition is intended to require a statistical  
42 analysis of the magnitude or likelihood of a particular impact.”

1  
2 To analyze the facility against this standard, the Council must first evaluate whether the  
3 identified recreational opportunity is important. The Council must then evaluate whether the  
4 design, construction or operation of the proposed facility could adversely impact the identified  
5 important recreational opportunity. If the proposed facility could adversely impact the  
6 resource, then the Council must consider the significance of the possible impact using the  
7 definition of significance above.

8  
9 *IV.L.1.a. Important Recreational Opportunities within the Analysis Area*

10  
11 The majority of the area within the site boundary is located entirely on private lands, with the  
12 exception of the step-up substation and the underground transmission line, which are located  
13 on lands managed by BPA and U.S. Army Corps of Engineers, respectively; neither contain  
14 designated recreational facilities. Recreational activities generally available in the vicinity of the  
15 proposed facility include fishing, waterfowl hunting, cycling, and boating.

16  
17 The applicant identified 25 recreational opportunities that it asserts satisfy the OAR 345-022-  
18 0100(1) criteria and, therefore, are “important” recreational opportunities under this standard.  
19 The applicant listed these 25 important recreational opportunities in Table T-1 and Figure T-1 in  
20 Exhibit T of the ASC. The following describes the “important” recreation opportunities  
21 identified by the applicant within the analysis area and includes the Council’s findings regarding  
22 the “importance” of each opportunity. Potential impacts to those identified “important”  
23 recreational opportunities are then discussed in the next section.

24  
25 A. State Managed Areas

26  
27 The first two wildlife areas discussed below are part of the Columbia Basin Wildlife Areas,  
28 which, in total, are a composition of four ODFW managed wildlife areas. Generally, these areas  
29 are managed by Oregon Department of Fish and Wildlife and, as explained in the Columbia  
30 Basin Wildlife Area Management Plan, are managed to provide important land base for the  
31 conservation and recreation of fish and wildlife within a highly privatized and altered landscape.  
32 Recreation provided by these areas include hunting, fishing, wildlife viewing, hiking, etc.<sup>264</sup>  
33 Management of the areas is funded through federal excise taxes on sporting arms and  
34 ammunition, in addition to hunting license dollars.

35  
36 The third state managed area is a park located in Umatilla County and owned by Oregon  
37 Department of Fish and Wildlife.

38  
39 Irrigon Wildlife Area

---

<sup>264</sup> Columbia Basin Wildlife Areas Management Plan, pg. 1.

1 The Irrigon Wildlife area consists of approximately 1,000 acres split between grassland,  
2 sagebrush steppe/shrubland, and permanently and seasonally-flooded wetland. According to  
3 the ASC, this wildlife area is located approximately 7.60 miles from the energy facility site and  
4 1.98 miles from the step-up substation.<sup>265</sup> As explained in the ASC, the area fronts the Columbia  
5 River for approximately 7 miles and straddles Morrow and Umatilla counties. The ASC explains  
6 that the area is managed for both wildlife protection and recreation. There are opportunities  
7 for walking, as well as a trail riding, and two public beaches.<sup>266</sup> The applicant proposes that this  
8 is an important recreational opportunity because ODFW manages the area consistent with the  
9 Columbia Basin Wildlife Areas Management Plan and, consequently, it qualifies as a “special  
10 designation or management,” which is a criterion included in considering the “importance” of a  
11 recreational opportunity under OAR 345-022-0100(1). Additionally, the northern boundary of  
12 the Irrigon Wildlife Area is the Columbia River, which is itself an irreplaceable resource.<sup>267</sup>  
13 Consequently, in addition to having a special management plan, the Irrigon Wildlife Area also  
14 has outstanding qualities, not easily replaceable. Therefore, the Council finds that the Irrigon  
15 Wildlife Area is an important recreational resource as defined by OAR 345-022-0100(1) because  
16 the recreational opportunity is operated under a special management plan and has outstanding  
17 qualities that are irreplaceable.

#### 18 19 Power City Wildlife Area

20 Power City is another Columbia Basin Wildlife area, consisting of 100 acres split between  
21 grassland and wetland (seasonal/perennial) habitat located north of Hermiston and south of  
22 Umatilla. According to the ASC, Power City is located approximately 7.01 miles from the facility  
23 site and 1.58 miles from the substation.<sup>268</sup> As explained in the ASC, the area is used for hiking,  
24 hunting and wildlife viewing.<sup>269</sup> The applicant proposes that this is an important recreational  
25 opportunity because ODFW manages the area consistent with the Columbia Basin Wildlife  
26 Areas Management Plan and, consequently, it qualifies as a “special designation or  
27 management,” which is a criterion included in considering the “importance” of a recreational  
28 opportunity under OAR 345-022-0100(1).<sup>270</sup> Based upon the special management of the area,  
29 the Council finds that the Power City Wildlife Area is an important recreational resource as  
30 defined by OAR 345-022-0100(1).

#### 31 32 Steelhead Park

33 Steelhead Park is a 7.4-acre park owned by ODFW. As explained in the ASC, the area is open for  
34 public access via Riverfront Park downstream for fishing, river access and hiking, though it does

---

<sup>265</sup> ASC, Exhibit T, T-6. Note that while the applicant does include a transmission line as a related and supporting facility, the applicant is proposing to reconductor an existing line, utilizing the existing infrastructure. Six new poles may be necessary for initial tie-in; however, Condition J.3 above requires the applicant to use poles similar to the existing infrastructure.

<sup>266</sup> ASC, Exhibit T, T-2.

<sup>267</sup> [http://www.dfw.state.or.us/maps/wildlife\\_areas/irrigon-powercity-willowcreek-coyotesprs.pdf](http://www.dfw.state.or.us/maps/wildlife_areas/irrigon-powercity-willowcreek-coyotesprs.pdf)

<sup>268</sup> ASC, Exhibit T, T-6.

<sup>269</sup> ASC, Exhibit T, T-2.

<sup>270</sup> ASC, Exhibit T, T-2.

not include any established trails.<sup>271</sup> Steelhead Park is located approximately 2.48 miles from the energy facility site and 6.23 miles from the step-up substation.<sup>272</sup> The applicant proposes that Steelhead park is an “important” recreational opportunity because it is owned by ODFW, and, therefore, satisfies the “special designation or management” criteria under OAR 345-022-0100(1). However, while the park is owned by ODFW, there does not appear to be any special management plan and, further, according to the ASC, ODFW does not maintain the park.<sup>273</sup> Beyond the park’s proximity to the Umatilla River, Steelhead Park does not have any unusual qualities. Therefore, the Council finds that this park is not an “important” recreational opportunity based upon the criteria listed in OAR 345-021-0100(1). Nonetheless, impacts to this park are discussed below, in consideration of the applicant’s recommendation of “importance.”

## B. Federally Managed Areas

### Lewis and Clark Commemorative Trail

As explained in the ASC, the Lewis and Clark Commemorative Trail is a day use hiking and equestrian trail located along the Columbia River upstream from the McNary Dam.<sup>274</sup> The trail is managed by United States Army Corps of Engineers and is designated as one of the National Scenic and National Historic Trails.<sup>275</sup> The trail is located 10 miles from the energy facility site and 2.19 miles from the substation. The applicant proposes that the trail is an important recreational opportunity based upon the “special designation or management” criteria listed under OAR 345-021-0100(1) due to the resource’s management by the Corps. In addition, the Lewis and Clark Commemorative Trail is also unique in its historic significance to the region, and, therefore, is also irreplaceable. Therefore, the Council finds that the Lewis and Clark Commemorative Trail is an important recreational resources as defined by OAR 345-022-0100(1) due to its special management as well as its unique and irreplaceable qualities.

### McNary Areas (McNary Wildlife Nature Area, McNary Dam, McNary Beach)

The McNary Wildlife Nature Area, as explained in the ASC, is a 318 acre day use recreation area, including shoreline fishing access and boating, on Columbia River Mile 291, at Lake Umatilla. The Corps manages the area, however, the ponds located within the wildlife area are stocked with trout by ODFW.<sup>276</sup> The McNary Wildlife Nature Area is located 8.55 miles from the energy facility site and 0.24 miles from the step-up substation. According to the ASC, recreational activities in this area consist of wildlife viewing, shoreline fishing access, boating and hiking.<sup>277</sup>

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<sup>271</sup> ASC, Exhibit T, T-3.

<sup>272</sup> ASC, Exhibit T, T-6.

<sup>273</sup> ASC, Exhibit T, T-6.

<sup>274</sup> ASC, Exhibit T, T-3.

<sup>275</sup> ASC, Exhibit T, T-3.

<sup>276</sup> ASC, Exhibit T, T-3.

<sup>277</sup> ASC, Exhibit T, T-3.

1 The McNary Dam lies immediately upstream of the Nature area and further upstream from the  
2 dam is the McNary Beach. The recreational opportunities at the dam consist of day use facilities  
3 and boating, including launch ramps, as well as a fish-viewing room; a powerhouse display  
4 gallery; and a Pacific salmon visitor information center.<sup>278</sup> The McNary Dam is 9.08 miles from  
5 Station and 0.79 miles from the step-up substation. Finally, the McNary Beach Park is a 118-  
6 acre area which provides opportunities for hiking, including access to trailhead to the Lewis and  
7 Clark Commemorative Trail, picnics, swimming areas, a playground and fishing access. The  
8 McNary Beach Park is 9.76 miles from the energy facility site and 1.87 miles from the  
9 substation.<sup>279</sup>

10  
11 The applicant proposes that each of the above areas are important based upon the “special  
12 designation or management” criterion of the rule because of the areas’ management by the  
13 Corps. In addition, each of the areas also satisfy at least one other criteria listed under the rule.  
14 The McNary Wildlife Nature Area is located on the Columbia River (which is an irreplaceable  
15 resource) and provides ponds stocked by ODFW and boating. The location of the McNary  
16 Wildlife Nature Area on the Columbia River is not necessarily rare, however, it does not provide  
17 an outstanding quality to the area. Further, ponds stocked by ODFW are rare and are in high  
18 demand in the local area. The McNary Dam is not replaceable and provides unusual qualities  
19 and uncommon opportunities as the area includes the Pacific Salmon visitor information center,  
20 boat launches, and a fish viewing room. Lastly, the McNary Beach Park has outstanding  
21 qualities as it provides access to the trailhead to the Lewis and Clark Commemorative trail and  
22 is not easily replaced considering its location on the Columbia River. Therefore, for these  
23 reasons, the Council finds that the McNary Wildlife Nature Area, the McNary Dam and the  
24 McNary Beach Park are important recreational resources as defined by OAR 345-022-0100(1).

#### 25 Spillway Park and West Park

26 Spillway and West Park are located near the McNary Wildlife Nature Area. Both parks are  
27 managed by the Corps as well. Spillway Park offers a day use area that includes picnic tables,  
28 access to shoreline and shaded area. West Park offers a day use area that includes picnic  
29 shelters and tables, barbeque grills, horseshoe pits, baseball fields and access to fishing.<sup>280</sup>  
30 Spillway Park is located 9.37 miles from the energy facility and 0.78 miles from the substation.  
31 West Park is located 8.83 miles from the energy facility and 0.24 miles from the substation.<sup>281</sup>  
32 West Park is located east of the existing McNary Substation.<sup>282</sup> As discussed above, the  
33 applicant determined that these two opportunities are considered “important” based on  
34 “special designation or management” criterion listed in OAR 345-022-0100(1) due to the areas’  
35 management by the Corps. While the Council appreciates the Corps’ management, the features  
36 associated with the park do not qualify the park as ‘important’ based upon the criteria under  
37

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<sup>278</sup> ASC, Exhibit T, T-4.

<sup>279</sup> ASC, Exhibit T, T-4.

<sup>280</sup> ASC, Exhibit T, T-4.

<sup>281</sup> ASC, Exhibit T, T-6.

<sup>282</sup> ASC, Exhibit T, T-4.



OAR 345-022-0100(1). Therefore, Council finds that the Spillway and West parks are not important recreational opportunities under OAR 345-022-0100(1). Nonetheless, impacts to this park are discussed below, in consideration of the applicant's recommendation of "importance."

#### Plymouth Park

As explained in the ASC, Plymouth Park is a 112-acre park located adjacent to the town of Plymouth, Washington. The Park is situated on a high desert environment on an island on the Columbia River. The park offers both a day use area consisting of picnic tables, barbeque facilities, swimming and boat launch, and a campground that is suitable for recreational vehicles or tent vehicles.<sup>283</sup> The Park is part of John Day Lock and Dam, Lake Umatilla which is managed by the Corps. The Park is located 8.45 miles from the energy facility and 1.45 miles from the step-up substation.<sup>284</sup> The applicant contends that the area qualifies as "important" based upon its management by the Corps, which is a "special designation or management." In addition, however, the Park is located on an island in the Columbia River which a rare and not replaceable location. Additionally, the park offers RV camping, which is somewhat uncommon on the Columbia River. Therefore, for these reasons, the Council finds that Plymouth Park is an important recreational resource as defined under OAR 345-022-0100(1) because it has a special designation or management and offer rare and unique recreational opportunities in the area.

### C. City Parks

#### City of Hermiston

The City of Hermiston owns and manages approximately 112 acres of public park lands, including 12 parks within the analysis area. Table T-1 of the ASC identifies each park managed by the City within the analysis area and the distance of each park from the Energy Facility Site and substation.<sup>285</sup> As explained in the ASC, the applicant contends that because of the significant usage by residents and visitors, each park should be considered an "important" recreation opportunity based on the "degree of demand" criterion listed in OAR 345-022-0100(1).<sup>286</sup> While the Council agrees that high degree of demand is one consideration, the Council finds that only the Hermiston Family Aquatic Center, Theater Sports Park, Oxbow Trail and Riverfront Park qualify as important recreational opportunities under the standard. The Hermiston Family Aquatic Center provides recreational water activities, including swim lessons, aqua fitness classes and lifeguarding. This type of recreational opportunity is not readily available elsewhere in the area. Likewise, Theatre Sports Park offers an array of sports fields including two adult softball fields, sand volleyball courts and a youth football and soccer field. Additionally, Oxbow Trail is the only true separate multi-modal path trail, while the Riverfront Park includes a walking path, fishing access and a non-motorized boat launch. Therefore, the Council finds that the Hermiston Family Aquatic Center, Theater Sports Park, Oxbow Trail and

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<sup>283</sup> ASC, Exhibit T, T-4.

<sup>284</sup> ASC, Exhibit T, T-6.

<sup>285</sup> ASC, Exhibit T, T-5.

<sup>286</sup> ASC, Exhibit T, T-5.

1 Riverfront Park qualify as important because beyond being in high demand all four offer unique  
2 and rare recreational opportunities that are not widely available in the area.

#### 3 4 City of Umatilla

5 As explained in the ASC, the City of Umatilla operates several parks, which provide access to the  
6 Umatilla and Columbia rivers. Table T-1 of the ASC identifies each park operated by the City  
7 within the analysis area and the distance of each park from the energy facility site and  
8 substation. As stated in the ASC, the applicant proposes that all identified City of Umatilla parks  
9 should be considered “important” because of the parks’ locations in proximity to the rivers,  
10 which provides “outstanding qualities.” In addition, however, Umatilla Landing and Umatilla  
11 Marina Park are irreplaceable in that they serve each year as the location for the Umatilla  
12 Landing Day’s, which commemorates and celebrates the city’s history as the first community in  
13 Eastern Oregon and the first county seat. For these reasons, the Council concurs finds that the  
14 City of Umatilla parks are important recreational opportunities, as defined under OAR 345-022-  
15 0100(1) because of their “outstanding qualities” due to their close proximity to the Umatilla  
16 and Columbia rivers.

#### 17 18 *IV.L.1.b. Potential Impacts to Important Recreation Opportunities*

19  
20 None of the recreational opportunities identified above would be directly impacted by  
21 construction and operation of the facility.<sup>287</sup> Therefore, as explained in the ASC, any potential  
22 impacts to important recreational opportunities would result from indirect impacts of the  
23 construction and operation of the proposed facility.<sup>288</sup>

#### 24 25 A. Noise

26  
27 Construction of the project would result in short-term increase in noise levels; however, as  
28 explained in the ASC, the applicant does not anticipate any long-term impacts on the identified  
29 recreational opportunities from noise. In Exhibit X, the applicant provided information about  
30 the predicted noise levels resulting from construction and operation of the facility. As  
31 previously explained, the DEQ noise rules address compliance at identified “noise sensitive  
32 receptors.” Because the recreational opportunities closest to the proposed facility site are not  
33 designated noise-sensitive receptors, there are no applicable noise requirements contained in  
34 the DEQ noise regulations addressed at OAR Chapter 340, Division 25. However, the applicant’s

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<sup>287</sup> A comment submitted in response to the DPO, requests that a condition be included to protect the Oregon Trail and other historic trails recognized in Oregon. The comment did not cite any applicable Council standard, provide any specific concerns regarding the DPO, or request particular revisions of the DPO. Based upon the evidence provided in the ASC, the proposed facility would not result in a significant adverse impact to any identified trail under the Council’s standards Therefore, in consideration of the evidence provided in the ASC, the Council does not make any revisions or require additional conditions. PERAPPDoc32.

<sup>288</sup> ASC, Exhibit T, T-7.

evidence regarding compliance with these regulations is at least relevant in considering the potential impacts of the facility on recreational opportunities in the analysis area.

The closest recreational opportunity to the energy facility site is Steelhead Park at 2.48 miles away, and the closest recreational opportunities to the step-up substation are the McNary Wildlife Nature Area and West Park, both 0.24 miles (1267.2 feet) from the substation. As stated in Exhibit X, the closest noise sensitive receptor to the Station is located 2,970 feet away. The Station operating at its loudest condition, according to the ASC, would contribute 47.1 dBA to the existing ambient noise level at 2,970 feet away, which would not result in an increase exceeding 10 dBA. Likewise, at 958 feet away the predicted sound level resulting from operation of the substation would be 38.2 dBA,<sup>289</sup> which would not result in an increase exceeding 10 dBA.

Given the distances of the closest recreational opportunities to the facility, the applicant states that it does not expect facility construction or operation to result in a significant adverse noise impact on any recreational opportunity within the analysis area.<sup>290</sup> Due to the distances between the recreational opportunities and the facility, and given that the facility would not result in an increase greater than 10 dBA at locations closer to the facility than the identified protected areas, the Council finds that construction and operation of the facility would not result in a significant adverse noise impact to any important recreational opportunity.

#### B. Increased Traffic

As explained in the ASC, the estimated peak-traffic associated with the facility within the analysis area is expected to be about 200 vehicles during the daily morning and evening commutes over the course of the construction phase of the project. For operation of the project, the applicant anticipates six to eight full time personnel, which would cause an increase in traffic of approximately five to ten vehicles per day.<sup>291</sup> As discussed in the ASC, project related would occur primarily at the Interstate Highway 84 and Westland Road interchange and important recreational opportunities are not available near these roads. Consequently, the applicant does not anticipate any significant adverse traffic impacts to the recreational opportunities resulting from construction and operation of the project. Based upon the evidence that the majority of project related track would occur at the I-84/Westland Road interchange and no recreational opportunities are accessed near this interchange, the Council finds that the facility will not result in any significant adverse traffic related impacts to important recreational opportunities.

#### C. Visual Impacts

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<sup>289</sup> ASC, Exhibit X, X-7.

<sup>290</sup> ASC, Exhibit T, T-8.

<sup>291</sup> ASC, Exhibit T, T-8.

1 To analyze visual impacts resulting from the facility, the applicant conducted a viewshed  
2 analysis. Based upon that analysis, the applicant determined that station structures would be  
3 potentially visible from portions of the City of Hermiston Parks (Sunset, McKenzie, Newport and  
4 the Hermiston Family Aquatic Center).<sup>292</sup> Additionally, the step-up substation would be  
5 potentially visible from portions of Plymouth Park, McNary Wildlife Nature Area, McNary Dam,  
6 Spillway Park, McNary Beach, and two City of Umatilla Parks (Umatilla Marina Park and Nugent  
7 Park). For the analysis, the tallest structures at the station and step-up substation were used,  
8 with the stack height representing 90 feet high and the step-up substation height representing  
9 at 20 feet. While the visual analysis determined that facility structures would be potentially  
10 visible at some important recreational opportunities, as explained in the ASC, visibility or visual  
11 impact to those recreational opportunities is unlikely because the “bare earth” analysis  
12 considered only topography and not the existing built structures.<sup>293</sup> Therefore, as discussed in  
13 the ASC, it is unlikely that the station and substation would be visible from any of the identified  
14 recreational areas because all important recreational opportunities that would be potentially  
15 impacted visually by the station are located within the City of Hermiston and separated from  
16 the station by a distance of at least 1 to 2 miles of urban development, in addition to the  
17 industrial development immediately adjacent to the Station.<sup>294</sup> Further, the applicant  
18 anticipates that the step-up substation would not visible from the majority of the potentially  
19 impacted important recreational opportunities because the McNary substation would be  
20 located directionally between the step-up substation and all of the identified important  
21 recreation areas, with the exception of Nugent Park. However, Nugent Park is separated from  
22 the station by over 1 mile of urban development in the City of Umatilla.<sup>295</sup> Therefore, the  
23 applicant proposes that it is unlikely the step-up substation would result in a significant adverse  
24 visual impact to Nugent Park considering the distance and current development in the city.  
25 Because of the distance between the recreational opportunities and the station and substation,  
26 as well as the development between the areas, the Council agrees that the construction and  
27 operation of the facility, would not result in a significant adverse visual impact to any of the  
28 important recreational opportunities within the analysis area.

29  
30 As noted in the ASC, the additional plume from the project would increase the number and add  
31 to the visibility of the plumes in the area. However, the plumes are not a new element of  
32 contrast to the landscape and would not substantially increase the presence of plumes in the  
33 area, considering the existing industrial facilities.<sup>296</sup> For those reasons, the Council agrees with  
34 the applicant’s assessment that the facility’s plume would not result in a significant adverse  
35 visual impact to recreational opportunities in the analysis area.

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<sup>292</sup> ASC, Exhibit T, T-9.

<sup>293</sup> ASC, Exhibit T, T-9.

<sup>294</sup> ASC, Exhibit T, T-9.

<sup>295</sup> ASC, Exhibit T, T-9.

<sup>296</sup> ASC, Exhibit T, T-9.

1 Based on the foregoing, the finds that the design, construction and operation of the facility are  
2 not likely to result in a significant adverse impact to any important recreational opportunities in  
3 the analysis area.

4  
5 IV.L.2. Recreation: Conclusions of Law  
6

7 Based on the foregoing findings and the evidence in the record, the Council finds that the  
8 facility complies with the Council's Recreation Standard.  
9

10 **IV.M. Public Services [OAR 345-022-0110]**  
11

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

19  
20 *(2) The Council may issue a site certificate for a facility that would produce power*  
21 *from wind, solar or geothermal energy without making the findings described in*  
22 *section (1). However, the Council may apply the requirements of section (1) to*  
23 *impose conditions on a site certificate issued for such a facility.*

24 \* \* \*

25  
26 IV.M.1. Public Services: Findings of Fact  
27

28 The Council's Public Services standard requires the Council to identify likely significant adverse  
29 impacts to the ability of public and private service providers to supply sewer and sewage  
30 treatment, water, storm water drainage, solid waste management, housing, traffic safety,  
31 police and fire protection, health care, and schools. OAR 345-022-0110(2) and (3) do not apply  
32 to the proposed facility because it would not produce power from wind, solar or geothermal  
33 energy, and the facility is not a special criteria facility as defined in OAR 345-015-0310.  
34 Therefore, only the criteria specified in OAR 345-022-0110(1) apply to the proposed facility.  
35

36 The applicant provided information in Exhibit U about the potential impacts of the facility on  
37 public services. The project order identified the analysis area for the standard as the area within  
38 the site boundary and 10 miles from the site boundary. The project would be located in  
39 Umatilla County, Oregon approximately 3 miles southwest of the Hermiston city limits.  
40 However, the analysis area also includes parts of Morrow County, Oregon, and Benton County,  
41 Washington. As explained in the ASC, for purposes of potential impacts to public services, the  
42 applicant analyzed only impacts to Oregon communities because 1) the areas of Benton County

1 that fall within the analysis area have very low populations that do not include any  
2 incorporated areas; and 2) the large number of service providers available in Oregon.<sup>297</sup> While  
3 the public services standard does not exclude consideration of impacts to public services out of  
4 the state of Oregon, the Council finds that, because of the reasons provided by the applicant, in  
5 addition to the geographic barrier formed by the Columbia River, the proposed facility would  
6 not likely impact service providers within the portion of the analysis area that lies in  
7 Washington State.

#### 9 A. Sewage, Storm Water, and Solid Waste

11 During construction the applicant proposes to utilize a contractor to bring portable toilets to  
12 the site and manage and transport any sanitary sewage offsite. According to the ASC, the  
13 American National Standards Institute calls for one portable toilet per 10 workers for a 40-hour  
14 work week. For a peak construction crew, the applicant anticipates approximately 225 workers;  
15 therefore, approximately 25 portable toilets would be required.<sup>298</sup> The closest wastewater  
16 treatment plant in the analysis area is the City of Hermiston's Recycled Water Facility. The  
17 facility currently has a receiving capacity of 1.7 million gallons per day of sewage and the  
18 capacity was expected to increase to 3.4 million in November of 2014 when a new plant came  
19 online.<sup>299</sup> According to staff at the Recycled Water Facility, the volume of wastewater  
20 associated with 25 portable toilets would not have any impact on the ability of the facility to  
21 provide service.<sup>300</sup> During operation, the applicant proposes that sewage collection, treatment  
22 and disposal would be conducted through an onsite septic system, which would require no  
23 service providers.<sup>301</sup> Therefore, there would be no adverse impacts to service providers related  
24 to operational sewage. Based upon the anticipated number of portable toilets during  
25 construction of the facility, and in consideration of the receiving capacity of the City of  
26 Hermiston's Recycled Water Facility, the Council finds that the facility would not impact the  
27 ability of City of Hermiston's Recycled Water Facility to continue to provide service to the area.

29 The applicant proposes to retain stormwater during construction onsite through a system of  
30 berms and ditches directing stormwater to detention basins. The applicant states that during  
31 construction, stormwater runoff would be controlled and treated, utilizing best management  
32 practices, in accordance with its NPDES 1200-C application submitted to DEQ. (See Section D  
33 above, for a further discussion re: soil protection and site certificate conditions).<sup>302</sup> During  
34 operation, the applicant plans to divert stormwater into an onsite 0.9 acre lined detention  
35 basin.<sup>303</sup> Based upon the above information, management of stormwater would be treated and

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<sup>297</sup> ASC, Exhibit U, U-2.

<sup>298</sup> ASC, Exhibit U, U-11.

<sup>299</sup> ASC, Exhibit U, U-11.

<sup>300</sup> ASC, Exhibit U, U-11.

<sup>301</sup> ASC, Exhibit U, U-4.

<sup>302</sup> ASC, Exhibit U, U-6.

<sup>303</sup> ASC, Exhibit U, U-6.

1 retained onsite, therefore, independent of any community systems and consequently without  
2 impact to any public or private service providers.

3  
4 The applicant proposes to minimize solid waste generated during construction and to recycle as  
5 much material as possible. However, for solid waste that cannot be recycled, the applicant  
6 proposes to transport solid waste to the nearest approved landfill, the Finley Buttes Regional  
7 Landfill.<sup>304</sup> Total solid waste production during construction is estimated at approximately 2.5  
8 tons per month over the 18 months of significant construction.<sup>305</sup> Based upon the capacity of  
9 the landfill, which has an annual receiving capacity of 1,000,000 tons of waste and an estimated  
10 life of over 200 years the applicant anticipates that facility construction would not pose a  
11 significant impact on the ability of the provider.

12  
13 During operation, the applicant estimates that the Station would produce approximately 10  
14 tons per year of refuse during normal operation, assuming no ZLD system. If a ZLD systems is  
15 utilized, it would produce approximately 1,540 tons per year of crystallized solids that would be  
16 disposed of as solid waste via landfill.<sup>306</sup> As explained above and in the ASC, the Finley Buttes  
17 Regional Landfill has an estimated life of over 200 years and an annual receiving capacity of  
18 1,000,000 tons of waste.<sup>307</sup> The Landfill currently receives 600,000 tons per year. Additionally,  
19 the contracted solid waste management provider in Western Umatilla County is Sanitary  
20 Disposal, Inc. and it is anticipated that this provider would provide solid waste pick-up during  
21 operations, which would then deliver the waste to Finley Buttes Regional Landfill. According to  
22 the ASC, Sanitary Disposal, Inc. has confirmed it could handle an average of 30 tons/week  
23 without affecting its ability to provide waste disposal services in the area;<sup>308</sup> therefore, the  
24 facility would not have a significant adverse impact on the service provider. Further, based  
25 upon the capacity of the landfill, the applicant proposes that the facility's operational waste  
26 would not significantly impact the ability of the provider to provide solid waste management.<sup>309</sup>

27  
28 Based upon the above information, the Council concurs that the amount of waste to be  
29 generated by the facility during construction and operation would not impact the ability of  
30 those providers to continue to provide service in the area based upon available capacity of the  
31 identified service providers in the analysis area.

## 32 33 B. Water 34

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<sup>304</sup> ASC, Exhibit U, U-13.

<sup>305</sup> ASC, Exhibit U, U-13.

<sup>306</sup> ASC, Exhibit U, U-14.

<sup>307</sup> ASC, exhibit U, U-14.

<sup>308</sup> ASC, Exhibit U, U-14.

<sup>309</sup> ASC, Exhibit U, U-14.

1 The applicant anticipates using approximately 2.3 million gallons of water over the entire  
2 construction period.<sup>310</sup> As explained in the ASC, all non-potable water used for construction  
3 would be obtained from the Port of Umatilla. Non-sewage construction wastewater would  
4 either be trucked offsite for processing and disposal in an approved facility or routed to the  
5 Hermiston Generating Plant to supplement its cooling tower makeup water demand.<sup>311</sup>

6  
7 During operation, under normal operating conditions, the applicant anticipates using 1,319  
8 gallons per minute of raw water for industrial purposes. During the summer months, the raw  
9 water use would be slightly higher, at 1,637 gallons per minute.<sup>312</sup> As explained in the ASC, the  
10 Port of Umatilla would supply raw water via a new pipeline from the Hermiston Generating  
11 Plant, with a dedicated capacity of 2,000 gallons per minute. 2.3 million gallons of water for  
12 construction would be less than 20 hours of the dedicated 2,000 gpm allocation of water  
13 available for the facility from the Port. The applicant anticipates potable water needs to be less  
14 than 5,000 gallons per day during operation and would either be supplied from an onsite well  
15 or from a tie-in to the Port of Umatilla raw water line, with appropriate supplementary  
16 treatment. Therefore, because of the limited amount of potential potable water needs, a  
17 groundwater permit is not required pursuant to statute. As explained in the ASC, the Port of  
18 Umatilla's permit allows the Port to appropriate up to 155 cubic feet per second of Columbia  
19 River Water. By 2027, the Port estimates water demand to be about 59 cubic feet per second,  
20 which is only 38 percent of its allocation to provide water to its entire service area.<sup>313</sup>  
21 Therefore, even fully utilized, the 2,000 gallons per minute reserved allocation for the project is  
22 only 2.9 percent of the Port's total allocation and the Port has confirmed the availability of raw  
23 water in a letter to the applicant, as provided in the ASC.<sup>314</sup> Accordingly, based upon the  
24 anticipated water use of the facility during construction and operation and the Port's stated  
25 ability to supply the necessary water, the Council finds that the construction and operation of  
26 the facility would not likely result in a significant adverse impact to water providers in the  
27 analysis area.

28  
29 With regard to disposal of operational wastewater, the applicant intends to route all industrial  
30 wastewater discharges to the Hermiston Generating Plant for reuse as make-up cooling  
31 water.<sup>315</sup> However, if that is not option is not available for the reasons discussed above, the  
32 applicant proposes to treat water onsite through a high-efficiency reverse osmosis process then  
33 return the treated wastewater to the plant as a new process water, which would reduce the  
34 demand for raw water from the Port of Umatilla.<sup>316</sup> Regardless of which option is used, neither

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<sup>310</sup> ASC, Exhibit U, U-12.

<sup>311</sup> ASC, Exhibit U, U-4.

<sup>312</sup> ASC, Exhibit U, U-5.

<sup>313</sup> ASC, Exhibit U, U-12.

<sup>314</sup> ASC, Exhibit U, U-12.

<sup>315</sup> ASC, Exhibit U, U-12.

<sup>316</sup> ASC, Exhibit U, U-13.



1 requires the assistance of a service provider. Therefore, the Council finds that there would not  
2 be any impacts as a service provider would not be relied upon.

### 3 4 C. Housing

5  
6 According the ASC, there are a total of 35,135 housing units in Morrow and Umatilla counties.  
7 Morrow county has a vacancy rate of approximately 11.8 percent and for Umatilla County,  
8 approximately 9.4 percent.<sup>317</sup> For the City of Hermiston, the community in closest proximity to  
9 the project, there are 6,373 housing units with a vacancy rate of 5.1 percent.<sup>318</sup>

10  
11 During the peak of construction, the applicant anticipates 200 to 225 construction workers  
12 would be employed at the project site.<sup>319</sup> The ASC estimates that, based upon the location of  
13 the project, up to 65 percent of the construction workers may come from outside the analysis  
14 area. However, the applicant anticipates that only 10 percent of the in-migrating workers would  
15 rent or buy housing in the area because the majority are expected to be traveling construction  
16 workers who will use their own travel trailers.<sup>320</sup> Therefore, the applicant does not anticipate  
17 any impact to housing from construction of the facility because it anticipates no more than 15  
18 housing units to be rented or bought in the area by in-migrating construction workers.<sup>321</sup> Based  
19 upon the necessity of only 15 housing units during construction, and the amount of vacancy in  
20 the area, the Council concurs with the applicant's assessment and finds that there would not be  
21 an adverse impact on housing in the area from construction of the facility.

22  
23 During operation, the applicant anticipates no more than six to eight permanently employed  
24 staff, which, the applicant states would have an insignificant impact on the availability of local  
25 housing.<sup>322</sup> Based upon the information provided by the applicant regarding housing and  
26 vacancy in the area, the Council concurs that six to eight full time employee would not  
27 adversely impact housing in the area as the area could absorb additional residents. Therefore,  
28 the Council finds that operation would not adversely impact housing.

### 29 30 D. Traffic Safety

31  
32 The total construction period for the project is anticipated to last approximately 16 months and  
33 at peak construction, 225 workers could be employed at the site, all working the same day  
34 shift. In addition, 40 truck deliveries are assumed to be distributed evenly throughout the day  
35 shift. During operation, only six to eight full-time employees are anticipated. Based on the  
36 applicant's traffic impact analysis, the public roadways and intersections in the vicinity of the

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<sup>317</sup> ASC, Exhibit U, U-10.

<sup>318</sup> ASC, Exhibit U, U-10.

<sup>319</sup> ASC, Exhibit U, U-3.

<sup>320</sup> ASC, Exhibit U, U-16.

<sup>321</sup> ASC, Exhibit U, U-16.

<sup>322</sup> ASC, Exhibit U, U-16.

1 project would continue to operate within the applicable performance standards established by  
2 Umatilla County and the Oregon Department of Transportation during both construction and  
3 operation. No safety deficiencies or crash patterns were identified at study intersections; and  
4 the proposed site access on Westland Road conforms to Umatilla County's access management  
5 guidelines and would provide adequate access for trucks during construction and operation,  
6 assuming all access comes from the south.<sup>323</sup> While the traffic analysis indicates that the  
7 impacts associated with construction and operation of the facility are anticipated to be minimal  
8 and not result in a significant adverse impact to traffic safety, the Council adopts the following  
9 conditions to ensure safe access:

10  
11 **Condition M.1:** During construction of the facility, the certificate holder shall implement the  
12 following measures:

- 13  
14 (a) The certificate holder shall mount a right-turn prohibition sign with a supplemental  
15 "TRUCKS" rider plaque facing the westbound (driveway) approach;  
16 (b) The certificate holder shall mount a left-turn prohibition sign with a supplemental  
17 "TRUCKS" rider plaque facing the southbound (Westland Road) approach;  
18 (c) Prior to truck delivery of any oversize loads, a formal routing and delivery plan shall  
19 be developed by the certificate holder in conjunction with the department, in  
20 consultation with the Oregon Department of Transportation and Umatilla County; and  
21 (d) The certificate holder shall locate and maintain landscaping, and signing around  
22 aboveground utilities so that adequate sight distance is maintained.

23  
24 **Condition M.2:** Before beginning construction of any new road approaches or utility  
25 crossings, the certificate holder shall obtain all required permits from Umatilla County.

26  
27 **Condition M.3:** Upon completion of construction, the certificate holder shall restore public  
28 roads to pre-construction conditions or better to the satisfaction of the Umatilla County  
29 Public Works Department.

30  
31 In addition to traffic impacts associated with the proposed facility, ground level fogging and  
32 potential icing because of the cooling tower plume could also impact driving conditions. The  
33 applicant provided information about cooling tower effects in Exhibit Z of the application. As  
34 explained above, the Station would utilize a mechanical-draft "wet" cooling tower. Mechanical  
35 draft cooling towers use fans to force air into the cooling tower and through a fine spray of  
36 heated water, where evaporation cools the water stream and transfer heat to the air. The  
37 warm, moist air exhausts vertically, dispelling excess heat. When the warm, moist exhaust  
38 comes into contact with the cooler ambient atmosphere, the water vapor condenses into fine  
39 water drops, creating a visible "steam" plume.<sup>324</sup>

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<sup>323</sup> ASC, Exhibit U, U-16.

<sup>324</sup> ASC, Exhibit Z, Z-3.

1 As explained in the ASC, fogging from the plume may occur when the visible plume reaches the  
2 ground, and ice formation occurs when the visible plume reaches the ground under freezing  
3 conditions. The applicant conducted an analysis of the steam plume using the Seasonal/Annual  
4 Cooling Tower Impact model. As stated in the ASC, this model was created by Argonne National  
5 Laboratories in the mid-1980's to better evaluate impacts associated with water vapor plumes  
6 emitted from cooling towers. The model was used to assess plume visibility, deposition of  
7 cooling tower drift, ground-level fogging and icing, and shadowing by the plume and reduction  
8 of solar energy.<sup>325</sup> For ground level fogging and ice formation, the model used actual  
9 meteorological data (five years) to conservatively predict the occurrence of ice formation and  
10 other parameters. Based upon the results of the model, potential fogging impacts would be  
11 limited to 25 hours a year at locations immediately adjacent (within 150 meters/492 feet) of  
12 the Station and about 5 hours a year at distances of up to 800 meters (2,625 feet) from the  
13 cooling tower.<sup>326</sup> The area of land potentially affected by fogging would be limited to an area  
14 northeast, and to a lesser extent, to the southwest of the Station's cooling tower. Westland  
15 Road is the nearest road in this area and located largely to the West at a distance of  
16 approximately 300 meters. I-82 and I-84 are located approximately 1,000 meters to the west  
17 and southwest. The applicant anticipates that traffic hazards due to fogging of roadways would  
18 be minimal and the percentage of time that the plume would extend over the roadways would  
19 be fairly limited.<sup>327</sup>

20  
21 As stated in the ASC, based upon the results of the model, the horizontal and temporal extent  
22 of ice formation due to the Station's cooling tower plume would be limited, occurring only  
23 toward the south and southwest for 1 hour or less at 500 meters. In addition, there are no  
24 public roads within the 500 meters and few service roads in the area. Further, according to the  
25 ASC, the cumulative plume analysis showed no appreciable increase to impacts from icing  
26 considering the current plume from HGP.<sup>328</sup> Therefore, the applicant anticipates traffic hazards  
27 due to ice formation on roadways to be negligible and no potential significant adverse impacts.

28  
29 While the results of the model indicate that fogging and icing due to the facility's steam plume  
30 would be very limited and the impacts negligible, there remains the potential for traffic safety  
31 to be impacted. Because of the potential for traffic safety impacts due to operation of the  
32 proposed facility's steam plume, in the DPO the department recommended the Council adopt  
33 Condition M.4., which would require the certificate holder to report any complaints received  
34 regarding icing and fogging attributable to the proposed facility and the certificate holder to  
35 cooperate with the appropriate local public safety authorities to implement reasonable safety  
36 measures. However, in comments submitted in response to the DPO, the Umatilla County

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<sup>325</sup> ASC, Exhibit Z, Z-3.

<sup>326</sup> ASC, Exhibit Z, Z-12.

<sup>327</sup> ASC, Exhibit Z, Z-14.

<sup>328</sup> ASC, Exhibit Z, Z-14. Note to assess the combined plumes' impacts (the Station and the existing HGP), the applicant combined and modeled the two as if it were one existing tower.

1 Board of County Commissioners<sup>329</sup> requested that the Council require the applicant to enter  
2 into a 'development agreement' with the County. As explained in the County's comment, the  
3 development agreement would require the certificate holder to undertake roadway or access  
4 improvements as recommended by the County Public Works Director and would require the  
5 certificate holder to share in the cost and mitigation efforts related to any increased fogging  
6 and icing on the roadway that is attributable to the proposed facility.<sup>330</sup> The applicant proposed  
7 condition language in response to the County's comment, which the Council reviewed during its  
8 DPO review. In consideration of the County's comments and the applicant-proposed condition  
9 language, the Council adopts Condition M.4., as provided below:

10  
11 **Condition M.4:** Prior to beginning construction, the certificate holder shall enter into a  
12 development agreement with Umatilla County to provide roadway and access  
13 improvements recommended by the Umatilla County Public Works Director in conjunction  
14 with construction and operation of the energy facility and to pay the certificate holder's  
15 proportionate share of Umatilla County's costs of implementing measures to address  
16 fogging and icing on County roads potentially impacted by the operation of the energy  
17 facility."

18  
19 The ASC provides an evaluation of the plume's potential impact on the operations of the  
20 Hermiston Airport, which includes a qualitative assessment of the combined visual plumes, of  
21 both the facility and the HGP, to assess whether the visual plume could impact a pilot's visual  
22 reference on approach or take off. The Hermiston Airport is located approximately 5.3 miles to  
23 the east northeast of the proposed Station site.<sup>331</sup> According to the ASC, the Hermiston Airport  
24 Authority staff and Oregon Department of Aviation were consulted prior to the study. For the  
25 combined plume analysis, both the existing cooling tower of the Hermiston Generating Plant  
26 and the proposed tower were combined into one hypothetical cooling tower. As presented in  
27 the ASC, the results show a slightly increased chance of a visual plume formation at distances  
28 toward the Hermiston Airport. However, Figure Z-4 of the application shows that the percent  
29 of plume impacts (when occurring) to be less than one percent of the time at distances of  
30 approximately 3.8 miles from the project site or within 2.2 miles of the airport. At a distance of  
31 about 5.0 miles from the airport, the frequency rises to two percent of the time.<sup>332</sup> Therefore,  
32 the applicant concluded that the cooling tower plume would not generate a significant adverse  
33 visual impact in the general locale of the Hermiston airport. Based upon the information  
34 provided, the Council concurs that the impact from the proposed cooling tower plume would  
35 pose an insignificant impact to the Hermiston Airport.<sup>333</sup> Nonetheless, the Council adopts the

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<sup>329</sup> PERAPPD0c31.

<sup>330</sup> Ms. Echeverria also provided oral testimony during the public hearing regarding the potential impact of the steam plume and icing and fogging on the roadway. PERAPPD0c33.

<sup>331</sup> ASC, Exhibit Z, Z-1.

<sup>332</sup> ASC, Exhibit Z, Z-10.

<sup>333</sup> The department received oral testimony during the public hearing generally addressing steam plumes from natural gas facilities and their ability to impact aircraft up to 1000 feet above the plume as well as drones. The commenter requested a condition be included that would require the certificate holder to affirm

1 following condition to ensure that the facility structures do not impact operations at the  
2 Hermiston Airport.

3  
4 **Condition M.5.** Before beginning construction, the certificate holder shall submit Notice(s)  
5 of Proposed Construction or Alteration to the Federal Aviation Administration and the  
6 Oregon Department of Aviation. The certificate holder shall promptly notify the department  
7 of the responses from the FAA and Oregon Department of Aviation.

8  
9 E. Police and Fire Protection

10  
11 The applicant contacted the following entities regarding potential impacts on law enforcement  
12 and fire protection services:

- 13  
14 • *Oregon State Police*  
15 • *City of Hermiston Police Department; and*  
16 • *Hermiston Fire & Emergency Services*<sup>334</sup>

17  
18 As explained in the ASC, the Oregon State Police are responsible for primary law enforcement  
19 for state facilities, such as state roads and, as needed, support for local law enforcement  
20 authorities. For Umatilla County the State Police work out of the Pendleton Area Command,  
21 with a work site in Hermiston.<sup>335</sup> As discussed in the ASC, the Hermiston work site is supported  
22 by five troopers and one sergeant. There are two 8-hour shifts that run from 6 a.m. to 4:00 p.m.  
23 and 4:00 p.m. to 2:00 a.m. The State police have mutual aid agreements with the respective  
24 County Sheriff's Offices. These agreements, as described in the ASC, position the Sheriff's office  
25 as the primary law enforcement agency, with the state police providing backup as needed.<sup>336</sup>  
26 While only a small segment (approximately 1.5 miles) of the transmission line ROW will be  
27 located within the City of Umatilla, the City Police Department could provide backup support if

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that there will not be any conflict with the military training sites. The testimony provided did not cite any applicable Council standards, any evidence in the record, or any section of the DPO that warranted the requested condition. Nor did the commenter provide any facts to support the inclusion of the requested condition. As addressed above, the proposed facility is proposed to be located in Umatilla County, Oregon, and it would not be located within a military training route. Additionally, while they were provided Notice, the United States Department of Defense/U.S. Navy did not provide comment on the proposed facility on the record of the public hearing. Further, the applicant analyzed the impacts of the proposed facility's plume on Hermiston Airport, which is located approximately 5.3 miles to the east of the proposed facility site. In consultation with the Hermiston Airport as well as the Oregon Department of Aviation, the applicant conducted a qualitative assessment of the combined plumes of the proposed facility and the existing Hermiston Generating Plant. Based upon the results of that study, the applicant determined the visual impacts of combined plumes would be insignificant on the airport. Based upon the above considerations, the Council is making no additional revisions or requiring additional conditions. PERAPDoc33.

<sup>334</sup> The applicant also attempted to contact Umatilla County Sheriff's Office for consultation; however, there were no responses by either Undersheriff Littlefield or Sheriff Rowan. ASC, Exhibit U, U-7.

<sup>335</sup> ASC, Exhibit U, U-8.

<sup>336</sup> ASC, Exhibit U, U-8.

1 needed. As stated in the ASC, the City Police Department has a total of 227 paid and volunteer  
2 personnel, including positions for four sergeants and 12 patrol officers. In addition, the City has  
3 four detective staff positions.<sup>337</sup>  
4

5 The project site is located within the Hermiston Fire and Emergency Services District. The ASC  
6 explains that the district has a total of 43 paid and volunteer fire and rescue personnel.<sup>338</sup> The  
7 closest station to the project site is Station #3, which is located approximately 2 miles from the  
8 project site. Station #3 maintains a ladder truck with a 75-foot delivery system capable of  
9 dispensing water or foam, plus additional fire trucks, pumper trucks, water tenders, and two  
10 hazardous material teams with support vehicles.<sup>339</sup> Additionally, the State of Oregon has 13  
11 Regional Hazardous Materials Emergency Response Teams that are charged with protecting life  
12 and the environment by responding to chemical emergencies and minimizing the dangers  
13 associated with them. The project is located within the Region 10 team boundary and that team  
14 is led by the Hermiston Fire and Emergency Services.<sup>340</sup>  
15

16 According to the ASC and correspondence between the applicant and the Hermiston Fire &  
17 Emergency Services, Hermiston Fire & Emergency does not expect the project to have any  
18 significant impact on the district's ability to provide fire protection/emergency services.  
19 Further, the applicant proposes to store fire equipment on-site at the station as well as a fire  
20 protection system that would include a fire water system, a carbon dioxide extinguishing  
21 system provided with the CTG's, portable fire extinguishers, and a smoke detection system.  
22 These measures would further alleviate any impact of the proposed facility on the fire service  
23 providers in the area. In addition, assuming a peak workforce of 225 workers on site, the City of  
24 Hermiston Police Department does not anticipate the additional potential calls for service to  
25 pose a significant impact on the ability of the department to provide law enforcement  
26 services.<sup>341</sup> Based upon the police department's ability to continue to respond with the addition  
27 of 225 workers operation of the facility is not likely to impact their ability to provide services in  
28 the area, considering there would only be 6-8 full time employees. Additionally, the applicant  
29 proposes to mitigate impacts of operation of the facility on police service's by fencing the  
30 facility and including a monitored gated entrance; having a closed-circuit television camera and  
31 security lighting on the site; as well as fencing the step-up substation.  
32

33 To ensure the applicant implements the proposed mitigation measures to reduce potential  
34 impacts to the fire and police service providers the Council adopts the following conditions:  
35

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<sup>337</sup> ASC, Exhibit U, U-8.

<sup>338</sup> ASC, Exhibit U, U-8.

<sup>339</sup> ASC, Exhibit U, U-8.

<sup>340</sup> ASC, Exhibit U, U-8.

<sup>341</sup> ASC, Exhibit U, U-8.

1       **Condition M.6:** The site certificate holder shall fence the Station site and include a  
2       monitored gated entrance, security lighting and a closed circuit television camera shall be  
3       installed.

4  
5       **Condition M.7:** Prior to beginning construction, the certificate holder shall develop and  
6       implement a fire protection system, which shall include a fire water system, portable fire  
7       extinguishers, a smoke detection system and a carbon dioxide extinguishing system  
8       provided with the combustion turbine generators (CTG).

9  
10       **Condition M.8:** Prior to beginning operation of the facility, the certificate holder shall  
11       provide a site plan to the Hermiston Fire & Emergency Services District. The certificate  
12       holder shall indicate the actual location of all facility structures on the site plan. During  
13       operation, the certificate holder shall ensure that appropriate fire protection agency  
14       personnel have an up-to-date list of the names and telephone numbers of facility personnel  
15       available to respond on a 24-hour basis in case of an emergency on the facility site.

16  
17       For these reasons, and subject to compliance with the site certificate conditions, the Council  
18       finds that development of the facility would not increase demand for fire or police protection  
19       such that fire and police protection services to the community would be impacted.

#### 20 21       E. Health Care

22  
23       As explained in the ASC, the nearest full service health care center to the Project site is the  
24       Good Shepherd Medical Center, located approximately 5 miles from the project. This facility  
25       provides Trauma Level III services and includes 25-bed hospital and an emergency room that is  
26       open 24 hours a day.<sup>342</sup> Additionally, Saint Anthony's Hospital in Pendleton provides Trauma  
27       Level IV service. The ASC explains that the Hermiston Fire and Rescue District operates five  
28       ambulances to provide emergency medical transportation. Fire-med, a commercial provider, is  
29       also available in the area.<sup>343</sup> Life Flight network also provides air medical evaluation services  
30       from multiple bases in eastern Oregon, according to the ASC. As explained in the ASC, during  
31       construction the applicant anticipates a maximum of 225 construction workers and eight full-  
32       time employees. Based upon the number of construction and full-time employees and the  
33       number and proximity of available health care facilities in the region, including ambulance and  
34       life flight services, there would not be an adverse impact on the ability of these providers to  
35       deliver health services.<sup>344</sup>

36  
37       For these reasons and subject to compliance with the site certificate conditions, the Council  
38       finds that the construction and operation of the facility are not likely to have a significant  
39       adverse impact on the ability of health care providers to deliver services.

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<sup>342</sup> ASC, Exhibit U, U-9.

<sup>343</sup> ASC, exhibit U, U-9.

<sup>344</sup> ASC, Exhibit U, U-15.

1  
2 G. Schools  
3

4 The applicant provided school enrollment and capacity data for each public school in the  
5 analysis area in Table U-3 of the application. Based upon the enrollment summary and the  
6 anticipated construction data, the applicant does not anticipate any adverse impact to the  
7 school system. According to the ASC, the total estimated influx of workers renting or purchasing  
8 permanent housing in the area during construction is 15, which would correspond to  
9 approximately 30 children, assuming two children per household. However, as explained in the  
10 ASC, the Hermiston and Umatilla School Districts, while currently experiencing growing  
11 enrollment, have both confirmed that they could receive the total estimated influx within their  
12 respective districts and the increase would not have an impact on their ability to provide  
13 service.<sup>345</sup> Further, the other schools within the analysis area have been experiencing either  
14 stable enrollment or slight declines in enrollment, according to the ASC.<sup>346</sup> Based upon the ability  
15 of the two growing school districts to absorb additional children without concerns regarding  
16 capacity or service, the Council finds that the construction of the facility would not adversely  
17 impact the schools within the analysis area.  
18

19 During operation, as previously discussed, the applicant anticipates only six to eight full-time  
20 employees at the facility. Assuming maximum impact of eight employees and two children per  
21 household, operation of the facility would account for only an additional influx of 16 children to  
22 the school system. The applicant does not anticipate that operation of the facility would impact  
23 the schools and the Council agrees based upon the school systems' ability to absorb the greater  
24 potential impact during construction. Therefore, the Council finds that the operation of the  
25 facility would not adversely impact the schools within the analysis area.  
26

27 IV.M.2. Public Services: Conclusions of Law  
28

29 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
30 the site certificate conditions, the Council finds that the facility complies with the Council's  
31 Public Services Standard.  
32

33 **IV.N. Waste Minimization [OAR 345-022-0120]**  
34

35 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*  
36 *Council must find that, to the extent reasonably practicable:*  
37

38 *(a) The Applicant's solid waste and wastewater plans are likely to minimize*  
39 *generation of solid waste and wastewater in the construction and operation of the*

---

<sup>345</sup> ASC, Exhibit U, U-15.

<sup>346</sup> ASC, Exhibit U, U-15.



1           *facility, and when solid waste or wastewater is generated, to result in recycling and*  
2           *reuse of such wastes;*

3  
4           *(b) The Applicant's plans to manage the accumulation, storage, disposal and*  
5           *transportation of waste generated by the construction and operation of the facility*  
6           *are likely to result in minimal adverse impact on surrounding and adjacent areas.*

7  
8           *(2) The Council may issue a site certificate for a facility that would produce power from*  
9           *wind, solar or geothermal energy without making the findings described in section (1).*  
10          *However, the Council may apply the requirements of section (1) to impose conditions on*  
11          *a site certificate issued for such a facility.*

12          \* \* \*

13  
14          IV.N.1. Waste Minimization: Findings of Fact

15  
16          The Waste Minimization Standard generally requires the Council to find that the certificate  
17          holder will minimize the generation of solid waste and wastewater, and that the waste  
18          generated will be managed to result in minimal adverse impacts on surrounding and adjacent  
19          areas. Subsection (2) and (3), above, are not applicable to this application as the proposed  
20          facility would not produce power from wind, solar or geothermal energy, and the facility is not  
21          a special criteria facility as defined in OAR 345-015-0310. Therefore, only the criteria specified  
22          in OAR 345-022-0120(1) apply to the proposed facility, and the Council must make findings  
23          regarding the applicant's compliance with paragraphs (1)(a) and (1)(b) of the Waste  
24          Minimization standard.

25  
26          The applicant provided information about waste minimization in Exhibits G and V of the ASC.  
27          Exhibit G (Materials analysis) includes an inventory of the quantities of industrial materials that  
28          would be used at the facility during construction and operation, the plans for management of  
29          hazardous and non-hazardous substances during construction and operation, and the measures  
30          that the applicant proposes to take to prevent and contain spills. Exhibit V (waste minimization)  
31          includes the applicant's plans for management of solid waste, wastewater, and stormwater  
32          during construction and operation of the proposed facility. As proposed, the applicant's  
33          preferred option is to route waste water to Hermiston Generating Plant for reuse in the cooling  
34          towers; however, the ability of the applicant to utilize this option is dependent upon the ability  
35          of Lamb Weston to accept reclaimed water from the Hermiston Generating Plant that has come  
36          from the proposed facility.<sup>347</sup> As explained in the ASC, Lamb Weston's Water Pollution Control  
37          Facilities permit allows Lamb Weston to manage and utilize Hermiston Generating Plant's  
38          reclaimed water, along with its own reclaimed waters, by land application for beneficial use on  
39          the North Farm and Madison Farm in accordance with its plan approved by the Oregon  
40          Department of Environmental Quality.<sup>348</sup> However, Lamb Weston has not been able to consent

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<sup>347</sup> ASC, Exhibit V, V-1.

<sup>348</sup> ASC, Exhibit V, V-1.

1 to the project potentially sending reclaimed water to the HGP because the permit is under  
2 review by DEQ for renewal. Therefore, should Lamb Weston not be able to accept reclaimed  
3 water from the HGP that has come from the station, the applicant proposes to install a zero  
4 liquid discharge system.<sup>349</sup> Accordingly, management of waste using a ZLD system was analyzed  
5 in the application and addressed below.

#### 6 7 A. Solid Waste

8  
9 Overall, the applicant proposes to minimize the generation of solid waste during construction  
10 and operation of the facility through implementation of a waste management plan, detailed  
11 estimates of materials needed for construction and implementing efficient construction  
12 practices.<sup>350</sup> During construction, the applicant anticipates the project would produce about 2.5  
13 tons per month of solid waste for approximately 18 months.<sup>351</sup> Solid waste would include  
14 domestic refuse; office waste; packaging materials; steel cut-offs; and construction materials  
15 (concrete waste, wood, plastic, glass, erosion control materials, and miscellaneous debris).  
16 During operation, the applicant anticipates approximately 10 tons per year of solid waste,  
17 which would consist of office and maintenance waste.<sup>352</sup> In addition to the domestic solid  
18 waste, additional solid waste may be generated from the Station's water pretreatment system.  
19 The primary source of the solid waste would be silt from the raw water supply; however, these  
20 solids, if generated are not expected to be hazardous and would be included in the normal  
21 maintenance waste.<sup>353</sup>

22  
23 The applicant proposes to keep recyclable material separated from the solid waste stream to  
24 deliver to a recycling facility, such as R.S. Davis Recycling of Hermiston, Oregon. During  
25 construction, for solid waste that cannot be recycled, the applicant proposes to collect in roll-  
26 off bins and truck to an approved landfill. The closest landfill is the Finley Buttes Regional  
27 Landfill, which is located approximately 14 miles southwest of the station and has capacity to  
28 accept solid waste from the facility.<sup>354</sup> If the applicant utilizes the ZLD system, there would be  
29 no changes to the solid waste produced during construction.<sup>355</sup> To ensure the applicant  
30 implements waste minimization measures, the Council adopts the following condition:

31  
32 **Condition N.1:** The certificate holder shall implement a waste management plan during  
33 construction that includes but is not limited to the following measures:

34  
35 (a) Recycling steel, other metal scrap; and paper and cardboard waste;

---

<sup>349</sup> ASC, Exhibit V, V-2.

<sup>350</sup> ASC, Exhibit V, V-1 and V-7.

<sup>351</sup> ASC, Exhibit V, V-3.

<sup>352</sup> ASC, Exhibit V, V-3.;

<sup>353</sup> ASC, Exhibit V, V-3.

<sup>354</sup> ASC, Exhibit V, V-6.

<sup>355</sup> ASC, Exhibit V, Appendix V-1, pg. 1

- (b) Recycling wood waste to the maximum extent possible;
- (c) Collecting nonrecyclable waste for transport to a permitted solid waste disposal facility by a licensed waste hauler; and
- (d) Segregating all hazardous waste such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for recycling or disposal by a licensed firm qualified in the proper recycling or disposal of hazardous waste.

During operation, refuse would be collected in a roll-off bin and picked up weekly by a contractor; ultimate disposal would take place in a solid waste landfill. As with construction, the applicant proposes to separate out recyclable material and to deliver to a recycling facility.<sup>356</sup> Further, the applicant proposes to implement a waste management procedure, which would include a waste minimization plan. The waste management procedure would include program goals, responsibilities, waste determinations, storage and handling requirements; recording keeping requirements, training requirements and ongoing evaluations.

If the applicant utilizes the ZLD system, additional solid wastes would be produced during operation. All process wastewater produced during facility operations would be reclaimed as makeup water for the cooling tower to the maximum extent possible by the ZLD system. The remaining wastewater would then be routed to a crystallizer and converted to a solid waste.<sup>357</sup> At full load, 700 pounds of solids are anticipated to be generated per hour under annual average conditions. As explained in the ASC, under annual average conditions, that would amount to an annual average of 1,540 tons per year generated based on 4,400 hours per year of operation. However, the solid waste is expected to be non-hazardous and would be transported to a landfill with other facility waste.<sup>358</sup> As stated in the ASC, this generation of solid waste is not anticipated to impact the regional landfill.<sup>359</sup> However, the Council adopts the following condition to ensure the applicant implements a waste management plan during operation:

**Condition N.2:** The site certificate holder shall implement a waste management plan during operation that includes but is not limited to the following measures:

- (a) Training employees to minimize and recycle solid waste;
- (b) Recycling paper products, metals, glass, and plastics;
- (c) Recycling used oil and hydraulic fluid;
- (d) Collecting nonrecyclable waste for transport to a permitted solid waste disposal facility by a licensed waste hauler; and

---

<sup>356</sup> ASC, Exhibit V, V-7.

<sup>357</sup> ASC, Exhibit V, Appendix V-1, pg. 1

<sup>358</sup> ASC, Exhibit V, Appendix V-1, pg. 2.

<sup>359</sup> ASC, Exhibit V, Appendix V-1, pg. 6.

(e) Segregating all hazardous waste such as used oil, oily rags and oil absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for recycling or disposal by a licensed firm qualified in the proper recycling or disposal of hazardous waste.

Based on the above information, and subject to compliance with the site certificate conditions, the Council finds that the applicant can minimize the production of solid waste during construction and operation of the facility.

#### B. Waste Water and Storm water

During construction of the facility, the applicant anticipates wastewater to result from sanitary waste, stormwater, testing and commissioning of water supply systems, hydrostatic testing, flushing of the water supply pipelines, washing equipment and vehicles and washing concrete trucks after delivery of concrete loads. Portable toilets would be used during construction of the project and sanitary sewage would be managed and transported to a licensed sewage treatment plant.<sup>360</sup> As explained in the ASC, wastewater generated during washing equipment and vehicles, and washing concrete trucks after delivery of concrete loads would be treated with an oil/water separator and routed to the stormwater detention basin.<sup>361</sup> Wastewater generated during testing and commissioning of the water supply systems, hydrostatic testing and flushing of the water lines would be tested to determine the concentrations of the constituents present and then would either be trucked offsite for processing and disposal by CCS or routed to the Hermiston Generating Plant to supplement its cooling tower makeup water demand.<sup>362</sup> Further, the applicant proposes to manage stormwater and other surface water discharges in conformance with the NPDES 1200-C. Condition D.1 would require the certificate holder to conduct all construction work in compliance with an Erosion and Sediment Control Plan satisfactory to the Oregon Department of Environmental Quality, as required under the NPDES 1200-C permit. Should the applicant be required to utilize a ZLD system, there would be no changes to the wastewater produced during construction.<sup>363</sup> The Council adopts the following condition regarding wastewater during construction to ensure the proper handling:

**Condition N.3:** The certificate holder shall provide portable toilets for on-site sewage handling during construction and shall ensure that they are pumped and cleaned regularly by a licensed contractor who is qualified to pump and clean portable toilet facilities.

During operations, the applicant proposes that the Station would produces wastewater from sanitary sewage, cooling tower blowdown, demineralized water production wastes, combustion

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<sup>360</sup> ASC, Exhibit V, V-8.

<sup>361</sup> ASC, Exhibit V, V-8.

<sup>362</sup> ASC, Exhibit V, V-8.

<sup>363</sup> ASC, Exhibit V, Appendix V-1, pg. 3.

1 turbine water wash wastes, plant and equipment drain wastes, service water, evaporative  
2 cooling, multimedia filtration backwash and stormwater.<sup>364</sup> Because the Station is scheduled to  
3 operate at varying load conditions, at any time the quantities of wastewater could range from  
4 zero to 100%.<sup>365</sup> Table T-1 of the ASC, provides the applicant's anticipated wastewater volumes,  
5 per source of wastewater.

6  
7 To dispose of operational wastewater, the applicant anticipates routing cooling tower  
8 blowdown, as well as all other suitable wastewater streams, to HGP for reuse as makeup water  
9 for the cooling towers.<sup>366</sup> As explained in the ASC, the cooling tower blowdown from the  
10 Station would be a higher grade of wastewater in terms of the total dissolved solids because  
11 the intercooler system has a low tolerance for solids build-up; therefore, the applicant proposes  
12 to reclaim the cooling tower blowdown along with other wastewater streams and route it to  
13 the HGP. Reclaiming the wastewater and routing to HGP would enable reuse of wastewater and  
14 would decrease the need for cooling tower chemicals and makeup water at the HGP. Should  
15 the applicant be required to utilize a ZLD system, no additional wastewater is anticipated  
16 because process wastewater produced during facility operations would be reclaimed as  
17 makeup water for the cooling tower to the maximum extent possible with the remaining waste  
18 water routed to a crystallizer and converted to solid waste.<sup>367</sup>

19  
20 The ASC explains that periodically, to maintain the combustion turbine generator, the  
21 compressor must be water-washed and the process sumps and oil/water separator cleaned  
22 out. The wash water would be tested to determine constituent concentrations and trucked  
23 offsite for processing and disposal. As stated in the ASC, the wastewater from cleaning process  
24 sumps and the oil/water separator would be deemed nonhazardous, and, normally, the  
25 wastewater from water washing the compressor would also be deemed to be nonhazardous.  
26 As proposed by the applicant, non-hazardous wastewater would be transported offsite for  
27 treatment and disposal by a contractor;<sup>368</sup> however, wastewater determined to be hazardous  
28 would be transported by a contractor to the Chemical Waste Management facility in Arlington,  
29 Oregon.<sup>369</sup>

30  
31 Stormwater amounts would be determined by the region's weather. The applicant proposes to  
32 collect stormwater from building roofs and other impervious surfaces in a stormwater  
33 detention basin and allow it to evaporate and percolate.<sup>370</sup> Any potentially contaminated  
34 stormwater would first pass through an oil/water separator before being routed to the basin.  
35 As explained in the ASC, the basin would be designed for a 100-year return period 24-storm

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<sup>364</sup> ASC, Exhibit V, V-4.

<sup>365</sup> ASC, Exhibit V, V-4.

<sup>366</sup> ASC, Exhibit V, V-7.

<sup>367</sup> ASC, Exhibit V, Appendix V-1, pg. 1.

<sup>368</sup> ASC, Exhibit V, V-6.

<sup>369</sup> ASC, Exhibit V, V-6.

<sup>370</sup> ASC, Exhibit V, V-6.

1 event plus another 50 percent capacity. A 100-year return period 24-hour storm event is  
2 expected to generate 2.25 inches of precipitation or about 132,780 cubic feet of stormwater;  
3 the basin is expected to be sized for about 199,163 cubic feet of stormwater.<sup>371</sup> The applicant  
4 proposes to construct a new sanitary septic leach field onsite for the six to eight full-time  
5 employees at the station. As explained in the ASC, the DEQ would regulate the sanitary sewage  
6 system.<sup>372</sup>

7  
8 Based on the foregoing, and subject to compliance with the site certificate conditions, the  
9 Council finds that the applicant's plans for wastewater management are likely to minimize  
10 generation of wastewater during construction and operation of the facility.

#### 11 C. Hazardous Waste

12  
13  
14 Potentially hazardous waste could include oil rags, spent batteries, and equipment  
15 maintenance solvents, paints and oils. However, as explained in the ASC, the applicant expects  
16 to generate hazardous waste at a rate that is less than 220 pounds per month, which would  
17 qualify the facility as a Conditionally Exempt Small Quantity Generator of hazardous waste, per  
18 Title 40 CFR § 261.5. Further, the applicant proposes to store less than 2,200 pounds of  
19 hazardous waste at a time.<sup>373</sup> Nonetheless, the applicant proposes to develop a hazardous  
20 materials management plan and to store the materials in sealable drums in a secure onsite  
21 location.<sup>374</sup> The applicant further proposes to develop both a construction and operational Spill  
22 Prevention Control and Countermeasures (SPCC) Plan.<sup>375</sup> Condition D.6, above, requires the  
23 certificate holder to implement a Hazardous Materials Management and Monitoring Plan. In  
24 addition, Condition D.7 requires the certificate holder to develop and implement a SPCC plan.  
25 However, the Council also adopts the following conditions to ensure hazardous wastes  
26 generated are properly collected and stored:

27  
28 **Condition N.4:** The certificate holder shall use hazardous materials in a manner that  
29 protects public health, safety and the environment and shall comply with all applicable  
30 local, state, and federal environmental laws and regulations.

31  
32 **Condition N.5:** The certificate holder shall collect all hazardous solid waste, including oily  
33 waste, used filters, and oily rags or absorbents in sealable drums. The certificate holder shall  
34 collect used oils, solvents, and cleaning materials in tanks or barrels supplied by material  
35 vendors.  
36

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<sup>371</sup> ASC, Exhibit V, V-12.

<sup>372</sup> ASC, Exhibit V, V-15.

<sup>373</sup> ASC, Exhibit V, V-3.

<sup>374</sup> ASC, Exhibit V, V-3.

<sup>375</sup> ASC, Exhibit V, V-7.

1        **Condition N.6:** The certificate holder shall store hazardous chemicals in aboveground  
2        containers or tanks located within secondary containment areas. Other chemicals and  
3        lubricants needed for facility maintenance and operation shall be stored in the facility  
4        buildings.

5  
6        Should the applicant be required to install a ZLD system, there would be no impact on the  
7        production of hazardous waste as the waste produced is anticipated to be non-hazardous solid  
8        waste and disposed of at a landfill.<sup>376</sup>

9  
10       Based on the foregoing, and subject to compliance with the site certificate conditions, the  
11       Council finds that the applicant's plans for handling hazardous wastes are likely to minimize  
12       impacts of hazardous wastes during construction and operation of the facility.

13  
14       **IV.N.2. Waste Minimization: Conclusions of Law**

15  
16       Based on the foregoing findings and the evidence in the record, and subject to compliance with  
17       the site certificate conditions, the Council finds that the facility complies with the Council's  
18       Waste Minimization Standard.

19  
20       **IV.O. Siting Standards for Transmission Lines [OAR 345-024-0090]**

21  
22       *To issue a site certificate for a facility that includes any transmission line under Council*  
23       *jurisdiction, the Council must find that the Applicant:*

24  
25            *(1) Can design, construct and operate the proposed transmission line so that alternating*  
26            *current electric fields do not exceed 9 kV per meter at one meter above the ground*  
27            *surface in areas accessible to the public;*

28  
29            *(2) Can design, construct and operate the proposed transmission line so that induced*  
30            *currents resulting from the transmission line and related or supporting facilities will be*  
31            *as low as reasonably achievable.*

32  
33       **IV.O.1. Siting Standards for Transmission Lines: Finding of Fact**

34  
35       OAR 345-024-0090 addresses safety hazards associated with electric fields around transmission  
36       lines.<sup>377</sup> OAR 345-024-0090(1) sets a limit for electric fields from transmission lines in areas that  
37       are accessible to the public; and OAR 345-024-0090(2) requires measures to reduce the risk of  
38       induced current. The applicant provided evidence about electric transmission lines proposed as  
39       part of the facility in Exhibit AA. As explained in that Exhibit, the applicant is proposing to  
40       reconductor an existing line. Currently, the double-circuit steel monopoles support a 230-

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<sup>376</sup> ASC, Exhibit V, Appendix V-1, pg. 6.

<sup>377</sup> Magnetic field effects are addressed in Section IV.U, Public Health and Safety.

1 kilovolt transmission line and a 115-kV transmission line. The development of the station, as  
2 explained in the ASC, would require restringing the 115-kV side of the transmission line to 230-  
3 kV.

#### 4 5 A. Electric Fields 6

7 As explained in the ASC, the applicant performed an analysis to determine the electrical effects  
8 of replacing the present 115-kV to 230-kV transmission line on the double circuit transmission  
9 infrastructure. The applicant calculated the electric fields, magnetic fields, audible noise, and  
10 radio interference strengths within 200 feet of the right of way center line, with an emphasis on  
11 the minimum ROW width of 25 feet.<sup>378</sup>As the ASC explains, electric field strength is dependent  
12 upon voltage; therefore, as the proposed transmission line would increase the present voltage  
13 on the system, the applicant anticipates an increase in the electric field strength.<sup>379</sup> The  
14 applicant examined EMF impacts with respect to the narrowest width identified from the ROW,  
15 which is approximately 25 feet. The maximum EMF effects were calculated from the center line  
16 of the ROW to approximately 200 feet to determine the field strengths for all occupied  
17 structures near the transmission line. The maximum electric field strength at 1 meter above  
18 ground was calculated to be located approximately 20 feet from the ROW center line, with a  
19 magnitude of 1.34 kilovolts per meter. Further, the electric field strengths at the minimum  
20 ROW width of 25 feet were calculated to be 1.31 kilovolts per meter.<sup>380</sup>As demonstrated in  
21 Table AA-1, all structures found within and near to the right of way boundaries were found to  
22 experience electrical effects well below the EMF standards outlined in OAR 345-024-0090.  
23 Therefore, based upon these calculations, the expected maximum calculated electric fields falls  
24 well below the 9-kilovolt per meter maximum established in OAR 345-024-0090(1).  
25

26 Based on the review of Exhibit AA, the Council finds that the applicant can design, construct,  
27 and operate the proposed transmission line so that alternating current fields to not exceed 9.0  
28 kilovolts per meter at one meter above ground surface in areas accessible to the public.  
29

#### 30 B. Induced Current 31

32 As the Council has previously determined, the magnetic and electric fields around alternating  
33 current transmission lines can induce current or voltage in nearby objects. Induced *currents* are  
34 not hazardous to people but can be a concern for railroad communications and pipeline  
35 cathodic protections systems that parallel transmission lines.<sup>381</sup>As explained in the ASC, the  
36 proposed conductor design for the reconducted transmission line would utilize a two-  
37 conductor bundle design and arrange each phase conductor such that the greatest feasible

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<sup>378</sup> ASC, Exhibit AA, A-4.

<sup>379</sup> ASC, Exhibit AA, A-4.

<sup>380</sup> ASC, Exhibit AA, A-4.

<sup>381</sup> *Final Order on the Montague Wind Power Facility* (September 2010), p. 87.



1 maximum reduction and cancelation of field strengths is achieved.<sup>382</sup> Under OAR 345-027-0023,  
2 the Council may adopt certain site specific conditions. Two of these conditions implement the  
3 requirements in the Siting Standards for Transmission Lines that relate to reducing possible  
4 impacts to human or animal contact with induced currents. To ensure compliance with this  
5 standard, the applicant must comply with the following site specific condition as required  
6 pursuant to OAR 345-027-0023(4)(a) and (b):  
7

8 **Condition O.1 [OAR 345-027-0023(4)]:**  
9

- 10 (a) The certificate holder shall design, construct and operate the transmission line in  
11 accordance with the requirements of the National Electrical Safety Code (American  
12 National Standards Institute, Section C2, 1997 Edition); and  
13 (b) The certificate holder shall develop and implement a program that provides  
14 reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or  
15 structures of a permanent nature that could become inadvertently charged with  
16 electricity are grounded or bonded throughout the life of the line.<sup>383</sup>  
17

18 Based on the evidence in the record, and subject to compliance with the site certificate  
19 conditions, the Council finds that the applicant can design, construct and operate the proposed  
20 transmission line so that induced currents from the transmission line and related and  
21 supporting facilities will be as low as reasonably achievable.  
22

23 **IV.O.2. Siting Standards for Transmission Lines: Conclusions of Law**  
24

25 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
26 the site certificate conditions, the Council finds that the facility complies with the Council's  
27 Siting Standards for Transmission Lines.  
28

29 **IV.P. Noise Control Regulations [OAR 340-035-0035]**  
30

31 *(1) Standards and Regulations:*  
32

\* \* \*

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<sup>382</sup> ASC, Exhibit AA, AA-2.

<sup>383</sup> The department received public testimony during the public hearing regarding the potential impacts of the reconducted transmission line on the operation of agricultural pivots. The testimony provided did not request any particular revisions to the DPO, reference any section of the application, nor cite any applicable Council standard. As explained above, based upon the information included in the application, the applicant can design and construct the proposed transmission line in compliance with the Council's Siting Standards for Transmission Lines. Further, Condition O.1, above, requires the certificate holder to develop and construct the line in accordance with the National Electrical Safety Code and to implement a program that provides reasonable assurances that all objects or structures of a permanent nature that could become inadvertently charged with electricity be grounded and bonded throughout the life of the line. Based upon the evidence in the application, the Council does not make any change or require any additional conditions. PERAPPDoc33.

1 (b) New Noise Sources:

2 \* \* \*

3 (B) New Sources Located on Previously Unused Site:

4  
5 (i) No person owning or controlling a new industrial or commercial noise  
6 source located on a previously unused industrial or commercial site shall  
7 cause or permit the operation of that noise source if the noise levels  
8 generated or indirectly caused by that noise source increase the ambient  
9 statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or  
10 exceed the levels specified in Table 8, as measured at an appropriate  
11 measurement point, as specified in subsection (3)(b) of this rule, except as  
12 specified in subparagraph (1)(b)(B)(iii).

13  
14 (ii) The ambient statistical noise level of a new industrial or commercial noise  
15 source on a previously unused industrial or commercial site shall include all  
16 noises generated or indirectly caused by or attributable to that source  
17 including all of its related activities. Sources exempted from the requirements  
18 of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j),  
19 and (k) of this rule, shall not be excluded from this ambient measurement.

20  
21 (iii) For noise levels generated or caused by a wind energy facility:

22  
23 (I) The increase in ambient statistical noise levels is based on an assumed  
24 background L50 ambient noise level of 26 dBA or the actual ambient  
25 background level. The person owning the wind energy facility may  
26 conduct measurements to determine the actual ambient L10 and L50  
27 background level.

28  
29 (II) The "actual ambient background level" is the measured noise level at  
30 the appropriate measurement point as specified in subsection (3)(b) of  
31 this rule using generally accepted noise engineering measurement  
32 practices. Background noise measurements shall be obtained at the  
33 appropriate measurement point, synchronized with windspeed  
34 measurements of hub height conditions at the nearest wind turbine  
35 location. "Actual ambient background level" does not include noise  
36 generated or caused by the wind energy facility.

37  
38 (III) The noise levels from a wind energy facility may increase the ambient  
39 statistical noise levels L10 and L50 by more than 10 dBA (but not above  
40 the limits specified in Table 8), if the person who owns the noise sensitive  
41 property executes a legally effective easement or real covenant that  
42 benefits the property on which the wind energy facility is located. The

1                    *easement or covenant must authorize the wind energy facility to increase*  
2                    *the ambient statistical noise levels, L10 or L50 on the sensitive property by*  
3                    *more than 10 dBA at the appropriate measurement point.*  
4

5                    *(IV) For purposes of determining whether a proposed wind energy facility*  
6                    *would satisfy the ambient noise standard where a landowner has not*  
7                    *waived the standard, noise levels at the appropriate measurement point*  
8                    *are predicted assuming that all of the proposed wind facility's turbines*  
9                    *are operating between cut-in speed and the wind speed corresponding to*  
10                   *the maximum sound power level established by IEC 61400-11 (version*  
11                   *2002-12). These predictions must be compared to the highest of either the*  
12                   *assumed ambient noise level of 26 dBA or to the actual ambient*  
13                   *background L10 and L50 noise level, if measured. The facility complies*  
14                   *with the noise ambient background standard if this comparison shows*  
15                   *that the increase in noise is not more than 10 dBA over this entire range*  
16                   *of wind speeds.*  
17

18                   *(V) For purposes of determining whether an operating wind energy facility*  
19                   *complies with the ambient noise standard where a landowner has not*  
20                   *waived the standard, noise levels at the appropriate measurement point*  
21                   *are measured when the facility's nearest wind turbine is operating over*  
22                   *the entire range of wind speeds between cut-in speed and the windspeed*  
23                   *corresponding to the maximum sound power level and no turbine that*  
24                   *could contribute to the noise level is disabled. The facility complies with*  
25                   *the noise ambient background standard if the increase in noise over*  
26                   *either the assumed ambient noise level of 26 dBA or to the actual ambient*  
27                   *background L10 and L50 noise level, if measured, is not more than 10 dBA*  
28                   *over this entire range of wind speeds.*  
29

30                   *(VI) For purposes of determining whether a proposed wind energy facility*  
31                   *would satisfy the Table 8 standards, noise levels at the appropriate*  
32                   *measurement point are predicted by using the turbine's maximum sound*  
33                   *power level following procedures established by IEC 61400-11 (version*  
34                   *2002-12), and assuming that all of the proposed wind facility's turbines*  
35                   *are operating at the maximum sound power level.*  
36

37                   *(VII) For purposes of determining whether an operating wind energy*  
38                   *facility satisfies the Table 8 standards, noise generated by the energy*  
39                   *facility is measured at the appropriate measurement point when the*  
40                   *facility's nearest wind turbine is operating at the windspeed*  
41                   *corresponding to the maximum sound power level and no turbine that*

1                                    *could contribute to the noise level is disabled.*

2                                    \* \* \*

3  
4                    IV.P.1. Noise Control Regulations: Findings of Fact

5  
6        The applicant provided information about noise generated by construction and operation of the  
7        proposed facility in Exhibit X. The proposed facility is a “new industrial or commercial noise  
8        source” under OAR 340-035-0035(1)(b) because construction of the facility would begin after  
9        January 1, 1975.<sup>384</sup> OAR 345-035-0035(1)(b) applies different standards to new noise sources  
10       based on the previous use of industrial sites. A site is defined as a “previously unused industrial  
11       or commercial site” and subject to the standards in OAR 340-035-0035(1)(b) if the site has not  
12       been in an industrial or commercial use at any time during the 20 years preceding the  
13       construction of a new noise source on site. Otherwise, the standards of OAR 340-035-  
14       0035(1)(b)(A) apply to a “previously used” site. The energy facility site and step-up substation  
15       site qualify as “previously unused” sites and, therefore, they are subject to OAR 340-035-  
16       0035(1)(b)(B). However, because the related transmission line is a proposed reconductoring of  
17       an existing line and the right-of-way currently contains a 230/115 kV transmission  
18       infrastructure, it would be considered a previously used industrial or commercial site and  
19       subject to OAR 340-035-0035(1)(b)(A)

20  
21        Maximum Allowable Noise Levels

22  
23        OAR 340-035-0035(5)(g) specifically exempts noise caused by construction activities from noise  
24        control regulations in OAR Chapter 340. Therefore, the maximum allowable noise level is  
25        evaluated based only on operation of the proposed facility.<sup>385</sup>

26  
27        Under OAR 340-035-0035(1)(b), new sources on previously unused sites shall not increase  
28        ambient statistical noise levels, L<sub>10</sub> or L<sub>50</sub>, by more than 10 dBA in any single hour or exceed the  
29        levels specified in Table 8 of OAR 340-035-0035. Table 8 of the regulation is provided below for  
30        reference. Regarding, the transmission line, facility generated noise must not exceed the noise  
31        limits specified in Table 8 of the regulation. As explained in the ASC, the facility would operate  
32        on a 24-hour basis so the noise generated by the facility must not exceed the more restrictive  
33        maximum permissible hourly statistical noise level for the nighttime hours. Therefore, to  
34        comply with the maximum allowable noise level under the regulation, the noise radiating from  
35        or attributable to operation of the proposed facility must not exceed a maximum hourly L<sub>50</sub>  
36        noise level of 50 dBA at any noise sensitive receptor.

37  

---

<sup>384</sup> OAR 340-035-0015(33) defines a “new industrial or commercial noise source” as any industrial or commercial noise source for which installation or construction was commenced after January 01, 1975 on a site not previously occupied by the industrial or commercial noise source in question.

<sup>385</sup> It should be noted that the applicant did provide information regarding construction noise levels for informational purposes within the application. See Section X.3.2 for additional details.

**Table P-1 Standards for New Industrial and Commercial Noise Sources**

Statistical Descriptor	Daytime (7 a.m. – 10 p.m.)(dBA)	Nighttime (10 p.m. – 7 a.m.)(dBA)
L50	55	50
L10	60	55
L1	75	60
<b>Source:</b> OAR 340-0035, Table 8. Available at: <a href="http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_035.html">http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_035.html</a>		

Under the DEQ regulations, compliance with the noise standards must be measured pursuant to OAR 340-035-0035(3) on “noise sensitive property.” The regulations define “noise sensitive property” as “real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used for industrial or agricultural activities is not noise sensitive property unless it meets the above criteria in more than an incidental manner.”<sup>386</sup> The “appropriate measurement point,” as defined by OAR 340-035-0035(3)(b), is “25 feet toward the noise source from that point on the noise sensitive building nearest the noise source” or “that point on the noise sensitive property line nearest the noise source,” whichever is farther from the source.

As explained in the ASC, to evaluate the noise levels resulting from operation of the project and to determine compliance with standard, the applicant first characterized existing background noise levels. The applicant conducted a noise survey on June 27-29, 2013, at the following locations:

- 1) the two noise sensitive properties located nearest the station (LT-1 is located approximately 2,970 feet to the southeast of the center point between power block 2 and power block 3 and LT-2 is located approximately 3,300 feet to the northeast of the center point between power block 2 and power block 3);<sup>387</sup>
- 2) the noise- sensitive property located nearest the step-up substation (LT-3 is located approximately 958 feet to east);<sup>388</sup> and
- 3) three residential locations along the transmission line.<sup>389</sup>

Table P-2, below, presents the lowest ambient hourly average L<sub>50</sub> for each of the applicant surveyed areas.

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<sup>386</sup> OAR 340-035-0015(38).

<sup>387</sup> ASC, Exhibit X, X-3.

<sup>388</sup> ASC, Exhibit X, X-3.

<sup>389</sup> ASC, Exhibit X, X-3.

**Table P-2 Lowest Measured Ambient Hourly Average L50**

<b>Property Location</b>	<b>Lowest Ambient Hourly Average L50</b>
77935 Cottonwood Bend Road – LT-1	39.3
78401 Cottonwood Bend Road – LT-2	40.1
30221 Scapelhorn Road – LT-3	39.8
Residences along the transmission line	38.7

The applicant then modeled major project related noise sources using the CadnaA model version 4.3.143.<sup>390</sup> As explained in the ASC, all equipment sound power levels entered into the model were determined by using vendor data for a similar project.<sup>391</sup> According to the applicant, the modeling was conservative because it predicted that the energy facility would operate with all power blocks under full load conditions, thereby producing worst-case noise levels.<sup>392</sup>

The applicant's model estimated that operation of the station would contribute 47.1 dBA to the existing ambient noise levels at LT-1 and 44.5 dBA at LT-2. Combining the sound level estimated for the Station with the lowest measured background L<sub>50</sub> for each property would result in an increase of about 8.5 dBA and 5.7 dBA respectively. Therefore, as stated the in ASC, operation of the energy facility would comply with OAR 340-035-0035(1)(b)(B).<sup>393</sup> Further, as explained in the ASC, operation of the step-up substation and transmission line would also comply with all applicable requirements contained in OAR 340-035-0035.<sup>394</sup> The model predicted noise level at the noise-sensitive property nearest the step-up substation, LT-3, would be 38.3 dBA. Combining this level with the lowest hourly L<sub>50</sub> measured would produce a total noise level of 42.1 dBA, which would be an increase of 2.3 dBA and, thus, in compliance with the standard.<sup>395</sup>

For the transmission line, the audible noise strengths were calculated within 200 feet of the ROW centerline at 6.6 feet above ground level. The resulting ROW boundary audible noise strength was 39.3 dBA, during wet weather conditions, including rain and fog, which result in the highest corona noise levels for high voltage alternating current lines. Therefore, based on the calculated audible noise strength, the operation of the transmission line would comply with the limits established in Table 8 under OAR 340-035-0035(1)(b)(A).<sup>396</sup>

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<sup>390</sup> ASC, Exhibit X, X-12.

<sup>391</sup> ASC, Exhibit X, X-12.

<sup>392</sup> ASC, Exhibit X, X-12.

<sup>393</sup> ASC, Exhibit X, X-11.

<sup>394</sup> ASC, Exhibit X, X-2.

<sup>395</sup> ASC, Exhibit X, X-11.

<sup>396</sup> ASC, Exhibit X, X-12.

1 Because the applicant used vendor data from a similar project to determine sound power levels  
2 for the equipment, to ensure compliance with the maximum allowable noise levels during  
3 operation of the facility, the Council adopts the following conditions:

4  
5 **Condition P.1:** Prior to beginning construction of the facility, the certificate holder shall re-  
6 run the noise model using the noise characteristics of the equipment that has been selected  
7 to ensure compliance with the noise regulations.

8  
9 **Condition P.2:** Upon written notification from the department, the certificate holder shall  
10 monitor and record the actual statistical noise levels during operations to verify that the  
11 certificate holder is operating the facility in compliance with the noise control regulations.  
12 The monitoring plan must be reviewed and approved by the department prior to  
13 implementation. The cost of such monitoring, if required, will be borne by the certificate  
14 holder.

15  
16 **Condition P.3:** During operation, the certificate holder shall maintain a complaint response  
17 system to address noise complaints. The certificate holder shall notify the department  
18 within 15 days of receiving a complaint about noise from the facility. The notification should  
19 include the date the complaint was received, the nature of the complaint, the complainant's  
20 contact information, the location of the affected property, and any actions taken, or  
21 planned to be taken, by the certificate holder to address the complaint.

22  
23 **Condition P.4:** To reduce construction noise impacts at nearby residences, the certificate  
24 holder shall:

25  
26 (a) Confine the noisiest operation of heavy construction equipment to the daylight  
27 hours, to the extent practicable;

28 (b) Require contractors to install and maintain exhaust mufflers on all combustion  
29 engine-powered equipment; and

30 (c) Establish a complaint response system at the construction manager's office to  
31 address noise complaints. Records of noise complaints during construction must be  
32 made available to authorized representatives of the Department of Energy upon  
33 request.

34  
35 Based on the evidence in the record, and subject to compliance with the site certificate  
36 conditions, the Council finds that the facility would comply with the noise control regulations  
37 for a new industrial or commercial noise source on a previously unused and used industrial or  
38 commercial site.<sup>397</sup>

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<sup>397</sup> In written comments submitted by the Umatilla County Board of County Commissioners, the County requested that the Council clarify how the state would enforce compliance with the noise regulations. Tamra Mabbott, Umatilla County Planning Director, provided oral testimony on behalf of the County during the public hearing on May 14, 2015 and stated that the department had done a sufficient job addressing how

1        IV.P.2. Noise Control Regulations: Conclusions of Law

2  
3        Based on the foregoing findings and the evidence in the record, and subject to compliance with  
4        the site certificate condition, the Council finds that the facility complies with the Noise Control  
5        Regulations in OAR 340-035-0035(1)(b)(A) and (B).  
6

7        IV.Q. Removal-Fill

8  
9        The Oregon Removal-Fill statutes (ORS 196.795 through 196.990) and regulations (OAR 141-  
10        085-0500 through 141-085-0785) adopted by the Oregon Department of State Lands (DSL)  
11        require a permit if 50 cubic yards or more of material is removed, filled or altered within any  
12        “waters of the state.”<sup>398</sup> The Council must determine whether a permit is needed and whether  
13        the applicant has demonstrated that the proposed facility is consistent with the protection,  
14        conservation and best use of the water resources of this state, and, to the extent the proposed  
15        facility is on state-owned lands, would not unreasonably interfere with the paramount policy of  
16        this state to preserve the use of its waters for navigation, fishing and public recreation.  
17

18        Federal law may require a Nationwide or Individual fill permit for the proposed facility if waters  
19        of the United States are affected. The U.S. Army Corps of Engineers administers Section 404 of  
20        the Clean Water Act, which regulates the discharge of fill into waters of the United States  
21        (including wetlands), and Section 10 of the Rivers and Harbors Appropriation Act of 1899, which  
22        regulates placement of fill in navigable waters. A single application form (a Joint Permit  
23        Application Form) is used to apply for both the State and Federal permits. The lateral extent of  
24        federal jurisdiction of waterbodies under Section 404 of the Clean Water Act is delineated by  
25        the ordinary high water mark (OHWM).  
26

27        The applicant provided information about wetlands and other waters of the state in Exhibit J of  
28        the application. The analysis area for Exhibit j is the area within the site boundary  
29

30        IV.Q.1. Removal-Fill: Findings of Fact

31  
32        A.    Delineation of Waters of the State  
33

34        The applicant identified and described existing waters of this state based on desktop analysis  
35        and field surveys conducted within the analysis area. For this project the OHWM of

---

enforcement would be handled. As explained in this section, based upon the information provided in the  
application, the proposed facility complies with the noise regulations. However, should the certificate holder  
exceed the requirements of the noise regulations during operation of the proposed facility, the certificate  
holder would be in violation of the site certificate and subject to Council enforcement pursuant to OAR 345,  
Division 29. PERAPDoc31.

<sup>398</sup> ORS 196.800(14) defines “Waters of this state.” The term includes wetland and certain other water  
bodies.



waterbodies within the analysis area was determined using the guidelines provided in *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the United States*. To inform the field studies, the applicant reviewed the following literature prior to conducting field surveys: *United States Geological Survey 7.5 minute topographic maps*; *National Wetland Inventory digital data*; *Soil Survey of Umatilla County*; *National Cooperative Soil Survey's web soil survey*; *National Hydrography Dataset digital data*; *Aerial imagery*; and *precipitation data from National Oceanic and Atmospheric Administration*. As described in the ASC, the literature review identified no National Wetlands Inventory-mapped wetlands, no hydric soils and no springs within the analysis area. However, through aerial imagery and topographic maps, three potentially jurisdictional canals were identified.<sup>399</sup>

Following the literature review, the applicant conducted field surveys of the analysis area on May 9 and August 1, 2013, following the methodologies described in 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.<sup>400</sup> As identified via the literature review and then confirmed through field surveys, there are no wetlands within the analysis area; however, there are the three canals first identified via aerial imagery within the analysis area. Table Q-1, below, identifies and describes each in more detail.

**Table Q-1 Summary of Waters of the State within the Study Area**

Waterbody ID/Name	Approximate Mile Post	Waterbody Type	Flow Type	Crossing Method	Approximate Impact Acreage
SS-001-001 High Line Canal	1.9	Canal	Intermittent	Bore under canal	0
SS-001-002 Westland A Canal	1.15	Canal	Intermittent	Bore under canal	0
SS-001-003 Westland A Canal	0.00/Station and Temporary Laydown Area	Canal	Intermittent	Bridge over canal	0

As explained in the ASC and in Table Q-1, all three canals have intermittent flow and are controlled by the local irrigation districts or local landowners. Based on applicant correspondence with the Westland Irrigation District, all three canals are dewatered seasonally and used only for irrigation.<sup>401</sup> Further, based up on the applicant's field observations, the canals do not likely provide any spawning, rearing or food-producing areas for fish within the

<sup>399</sup> ASC, Exhibit J, J-2.

<sup>400</sup> ASC, Exhibit J, J-2.

<sup>401</sup> ASC, Exhibit J, J-4.

1 analysis area.<sup>402</sup> The applicant proposes that the project would not impact any of the three  
2 canals because one waterbody would be crossed by a bridge and the other two would be  
3 crossed by an underground bore or horizontal directional drill. Additionally, there would be no  
4 removal-fill below the OHWM and no disturbance would occur above the OHWM or within the  
5 associated riparian areas.<sup>403</sup>

6  
7 The applicant's determinations of potential State jurisdiction for delineated wetlands and other  
8 waterbodies are preliminary until confirmed by the Oregon Department of State Lands (DSL).  
9 The wetland delineation report performed by the applicant was submitted to DSL for review  
10 and concurrence and was included in the ASC. DSL issued a letter of concurrence on July 17,  
11 2014, which concurred that the waterways are all canals operated and maintained for the sole  
12 purpose of irrigation, are dewatered during the non-irrigation season, and, are therefore not  
13 subject to the permit requirements of the removal-fill law because they are exempt per OAR  
14 141-085-0515(9).<sup>404</sup>

#### 15 16 B. Removal-Fill Permit

17  
18 As discussed above, there are no wetlands in the analysis area and the waterbodies within the  
19 analysis are not jurisdictional. Therefore, a state removal-fill permit is not required.<sup>405</sup>

#### 20 21 IV.Q.2. Removal-Fill: Conclusions of Law

22  
23 Based on the foregoing findings and the evidence in the record, the Council finds that the  
24 facility complies with the Removal-Fill law.

#### 25 26 IV.R. Ground Water

27  
28 Through the provisions of the Ground Water Act of 1955, ORS 537.505 to 537.795 and 537.992,  
29 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water  
30 rights for appropriation and use of the water resources of the state. Under OAR 345-022-  
31 0000(1)(b), the Council must determine whether the proposed facility would comply with these  
32 statutes and administrative rules. The applicant provided information about the anticipated  
33 water use for construction and operation of the proposed facility in Exhibit O of the application.  
34

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<sup>402</sup> ASC, Exhibit J, J-4.

<sup>403</sup> ASC, Exhibit J, J-4.

<sup>404</sup> ASC, Exhibit J, SDL Concurrence Letter. OAR 141-085-0515(9) states that existing irrigation ditches are not jurisdictional if they are operated and maintained for the primary purpose of conveying water for irrigation and are dewatered for the non-irrigation season for water incidentally retained in isolated low areas of the ditch or are used for stock water runs, provision of water for fire suppression, or to collect storm water runoff.

<sup>405</sup> See letter from Heidi Hartman of DSL confirming no DSL removal fill permit required.

1        IV.R.1. Ground Water: Findings of Fact

2  
3        The applicant anticipates that during construction, the project would use water for dust  
4        abatement, washing equipment and vehicles, washing concrete trucks after delivery of  
5        concrete loads, fire suppression during construction and water supply for testing and  
6        commissioning. The applicant anticipates using approximately 2.3 million gallons of water  
7        during the construction period.<sup>406</sup> As explained in the ASC, all non-potable water for  
8        construction activities would be obtained from the Port of Umatilla and the Port has provided a  
9        letter stating that it has the capacity and permits to supply the quantities of water necessary for  
10       construction.<sup>407</sup> As reflected in its letter, the Port can supply up to 2,000 gallons per minute of  
11       water to the station under a 'subsequent user classification.' The applicant proposes to obtain  
12       potable water from a new onsite well or from a tie-in with the process water system. However,  
13       according to the ASC, potable water demand would be less than 5,000 gallons per day, and,  
14       therefore would not require a permit under ORS 537.545(f).<sup>408</sup> Therefore, no permits are  
15       needed, nor are any permits required to be transferred or modified to supply the construction  
16       water needs of the station.

17  
18       During operation, the applicant estimates that the major water uses would be cooling tower  
19       makeup water and nitrogen oxide injection. Water would also be used for demineralized water  
20       production, potable water, and service water.<sup>409</sup> The applicant anticipates operational water  
21       use, during worst case conditions (i.e. summer conditions), to be approximately 1,637 gallons  
22       per minute.<sup>410</sup> As explained in the ASC, the Port of Umatilla would be the source of all non-  
23       potable water required to meet the facility's needs.<sup>411</sup> The Port of Umatilla has submitted a  
24       letter confirming it has the capacity and the permits to supply the facility with the necessary  
25       water needs.<sup>412</sup>

26  
27       In response to the DPO, the City of Hermiston and the Port of Umatilla ("the City") submitted  
28       comments as co-owners of the Port of Umatilla-City of Hermiston Regional Water System.<sup>413</sup>  
29       The City explained that while it is true that the Port has the capacity within its water right to  
30       serve the facility's water needs, several substantial upgrades to the physical capacity of the

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<sup>406</sup> ASC, Exhibit O, O-2.

<sup>407</sup> ASC, Exhibit O, O-2.

<sup>408</sup> ASC, Exhibit O, O-2.

<sup>409</sup> ASC, Exhibit O, O-2.

<sup>410</sup> ASC, Exhibit O, O-4. Should the applicant not be able to send its reclaimed waters to the cooling tower basin of the Hermiston Generating Plant to be reclaimed and recycled, the applicant has proposed to use a zero liquid discharge system. This system reclaims water to the maximum extent possible with a reverse osmosis system. However, use of this system would actually minimize the facility's water use; therefore, worst case water use would be approximately 1,322 gallons per minute of water with the ZLD system in place. ASC, Exhibit O, O-7.

<sup>411</sup> ASC, Exhibit O, O-3.

<sup>412</sup> ASC, Exhibit O, O-3.

<sup>413</sup> PERAPPD0c34.

1 water delivery system must be made in order to provide the facility with water. Therefore, the  
2 City requested that a condition be imposed specifically making the applicant responsible for the  
3 needed improvements. As discussed above under the Council's Organizational Expertise  
4 Standard, to issue a site certificate the Council must find that the applicant has, or has a  
5 reasonable likelihood of entering into, a contractual or other arrangement with the third party  
6 for access to the resource or service secured by that permit or approval. Based upon the Port's  
7 letter provided in the ASC, the department found that the applicant has a reasonable likelihood  
8 of entering into a contractual agreement with the Port for access to water. In addition,  
9 Condition B.7, above, requires the certificate holder to provide written confirmation to the  
10 department that the third parties have obtained all necessary permits or approvals and proof of  
11 agreements between the certificate holder and the third parties regarding access to the  
12 resources or services secured by the permits or approvals. Nonetheless, in response to the  
13 City's comment on the DPO, the applicant proposed an additional condition, to specifically  
14 require the applicant to enter into an agreement with the City that ensures completion of  
15 water system improvements. While an agreement between the City and the applicant is  
16 necessarily required under Condition B.7, and presumably that agreement would be amiable to  
17 both parties, the Council adopts the following condition:

18  
19 **Condition R.1:** The certificate holder shall enter into a contract with the owners of the  
20 Regional Water System to ensure completion of system improvements needed in order to  
21 provide water to the facility.  
22

23 Potable water during operation would be obtained from a new water well located onsite or  
24 obtained from a tie-in within the process water system. However, as with construction, potable  
25 water demand is anticipated to be less than 5,000 gallons per day and, therefore, would not  
26 require a permit.<sup>414</sup> Potable water would be required for items such as ice machines, cooler and  
27 sanitary facilities to support operating personnel. Based upon this information, no permits are  
28 needed, nor are any permits required to be transferred or modified to supply the facility's  
29 operational water needs.  
30

31 Based upon the above information, the Council finds that the facility complies with the  
32 applicable rules and statutes related to appropriation of and use of water resources. The  
33 Council, however, does adopt the following condition to ensure that the site certificate holder  
34 obtains and uses water as represented and proposed in the ASC:  
35

36 **Condition R.2:** During construction and operation of the facility, the certificate holder shall  
37 limit use of water obtained from the Port of Umatilla to no more than 2,000 gallons per  
38 minute and to amounts found to be within the scope of the water rights held by the Port.  
39

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<sup>414</sup> ASC, Exhibit O, O-3.

1        IV.R.2. Ground Water Act: Conclusions of Law

2  
3        Based on the foregoing findings and the evidence in the record, and subject to compliance with  
4        the site certificate conditions, the Council finds that the facility complies with the Ground  
5        Water Act of 1955.

6  
7        IV.S. Carbon Dioxide Standard

8  
9        **OAR 345-024-0500**

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

14  
15        **OAR 345-024-0590: Carbon Dioxide Standard for Non-Base Load Power Plant**

16        *To issue a site certificate for a non-base load power plant, the Council must find that the*  
17        *Council must find that the net carbon dioxide emissions rate of the proposed facility does not*  
18        *exceed 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power output, with*  
19        *carbon dioxide emissions and net electric power output measured on a new and clean basis.*  
20        *For a base load gas plant designed with power augmentation technology as defined in OAR*  
21        *345-001-0010, the Council shall apply this standard to the incremental carbon dioxide*  
22        *emissions from the designed operation of the power augmentation technology. The Council*  
23        *shall determine whether the carbon dioxide emissions standard is met as follows:*

24  
25        *(1) The Council shall determine the gross carbon dioxide emissions that are reasonably*  
26        *likely to result from the operation of the proposed energy facility. The Council shall base*  
27        *such determination on the proposed design of the energy facility, the limitation on the*  
28        *hours of generation for each fuel type and the average temperature, barometric*  
29        *pressure and relative humidity at the site during the times of the year when the facility is*  
30        *intended to operate. For a base load gas plant designed with power augmentation*  
31        *technology, the Council shall base its determination of the incremental carbon dioxide*  
32        *emissions on the proposed design of the facility, the proposed limitation on the hours of*  
33        *generation using the power augmentation technology and the average temperature,*  
34        *barometric pressure and relative humidity at the site during the times of the year when*  
35        *the facility is intended to operate with power augmentation technology. The Council*  
36        *shall adopt site certificate conditions to ensure that the predicted carbon dioxide*  
37        *emissions are not exceeded on a new and clean basis; however, the Council may modify*  
38        *the parameters of the new and clean basis to accommodate average conditions at the*  
39        *times when the facility is intended to operate and technical limitations, including*  
40        *operation considerations, of a non-base load power plant or power augmentation*  
41        *technology or for other cause.*

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

11      (3) If the applicant elects to comply with the standard using the means described in OAR  
12      345-024-0600(2), the Council shall determine the amount of greenhouse gas emissions  
13      reduction that is reasonably likely to result from each of the proposed offsets. In making  
14      this determination, the Council shall not allow credit for offsets that have already been  
15      allocated or awarded credit for greenhouse gas emissions reduction in another  
16      regulatory setting. The fact that an applicant or other parties involved with an offset  
17      may derive benefits from the offset other than the reduction of greenhouse gas  
18      emissions is not, by itself, a basis for withholding credit for an offset. The Council shall  
19      base its determination of the amount of greenhouse gas emission reduction on the  
20      following criteria and as provided in OAR 345-024-0680:

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

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

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

28      (4) Before beginning construction, the certificate holder shall notify the Department of  
29      Energy in writing of its final selection of an equipment vendor and shall submit a written  
30      design information report to the Department sufficient to verify the facility's designed  
31      new and clean heat rate and its nominal electric generating capacity at average annual  
32      site conditions for each fuel type. For a base load gas plant designed with power  
33      augmentation technology, the certificate holder shall include in the report information  
34      sufficient to verify the facility's designed new and clean heat rate, tested under  
35      parameters the Council orders pursuant to section (1), and the nominal electric  
36      generating capacity at average site conditions during the intended use for each fuel type  
37      from the operation of the proposed facility using the power augmentation technology.  
38      The certificate holder shall include the proposed limit on the annual average number of  
39      hours for each fuel used, if applicable. The certificate holder shall include the proposed  
40      total number of hours of operation for all fuels, subject to the limitation that the total  
41      annual average number of hours of operation per year is not more than 6,600 hours. In  
42      the site certificate, the Council may specify other information to be included in the

1 report. The Department shall use the information the certificate holder provides in the  
2 report as the basis for calculating, according to the site certificate, the gross carbon  
3 dioxide emissions from the facility and the amount of greenhouse gas emissions  
4 reductions the certificate holder must provide under OAR 345-024-0600.

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

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

25 (6) For a base load gas plant designed with power augmentation technology, every five  
26 years after commencing commercial operation, the certificate holder shall report to the  
27 Council the facility's actual hours of operation using the power augmentations  
28 technology for the each fuel type. If the actual gross carbon dioxide emissions, calculated  
29 using the new and clean heat rate, tested under parameters the Council orders pursuant  
30 to section (1), and the actual hours of operation using the power augmentation  
31 technology on each fuel during the five-year period exceed the projected gross carbon  
32 dioxide emissions for the five-year period calculated under section (4), the certificate  
33 holder shall offset any excess emissions for that period and shall offset estimated future  
34 excess carbon dioxide emissions using the monetary path as described in OAR 345-024-  
35 0600(3) and (4) or as approved by Council

### 36 37 **345-024-0600 Means of Compliance for Non-Base Load Gas Plants**

38 The applicant may elect to use any of the following means, or any combination thereof, to  
39 comply with the carbon dioxide emissions standard for non-base load power plants or for the  
40 incremental carbon dioxide emissions from the operation of a base load gas plant with power  
41 augmentation technology:  
42

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

6       (2) Implementing offset projects directly or through a third party, pursuant to OAR 345-  
7       024-0680. The Council may adopt site certificate conditions ensuring that the proposed  
8       offset projects are implemented by the date specified in the site certificate, but shall not  
9       require that predicted levels of avoidance, displacement or sequestration of greenhouse  
10      gas emissions be achieved.

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

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

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

34          (b) The Council shall specify in the site certificate a methodology for estimating  
35          future excess carbon dioxide emissions. The Department of Energy shall calculate  
36          estimated future excess emissions. To estimate excess emissions for the remaining  
37          period of the deemed life of the facility, the Department shall use the annual average  
38          number of hours of operation during the five-year period in which the certificate  
39          holder exceeded the estimated gross carbon dioxide emissions described in OAR 345-  
40          024-0590(5) and the new and clean heat rate and capacity for the facility, adjusted  
41          for the average temperature, barometric pressure and relative humidity at the site  
42          during the times of the year when the facility is intended to operate. If the annual



1 average hours exceed 6,600, the Department shall estimate emissions at 100 percent  
2 capacity for the remaining period of a deemed 30-year life of the facility. At the  
3 request of the certificate holder, the Council may, by amendment of the site  
4 certificate, use an alternative methodology to estimate future excess carbon dioxide  
5 emissions.

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

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

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

#### 24 **OAR 345-024-0610 Modification of the Standard for Non-Base Load Power Plants**

25 The council may by rule modify the carbon dioxide emissions standard for non-base load  
26 power plants in OAR 345-024-0590 so that the standard remains equivalent to the standard  
27 for the net carbon dioxide emissions rate of a base load gas plant, subject to the principles  
28 described in OAR 345-024-0510.  
29

#### 30 **OAR 345-024-0710 Monetary Path Payment Requirements**

31  
32  
33 (1) If the applicant elects to meet the applicable carbon dioxide emissions standard in  
34 whole or in part under OAR 345-024-0560(3), OAR 345-024-0600(3) or OAR 345-024-  
35 0630(2), (4) and (5), the applicant shall provide a bond or letter of credit in a form  
36 reasonably acceptable to the Council to ensure the payment of the offset funds and the  
37 additional funds required under section (4) of this rule. The applicant shall provide such  
38 security by the date specified in the site certificate. In the site certificate, the Council  
39 shall specify a date no later than the commencement of construction of the facility for  
40 base load gas plants and non-base load power plants. For nongenerating facilities, the  
41 Council shall specify a date no later than the commencement of construction of the  
42 facility for providing the initial bond or letter of credit, and the Council shall specify

1 conditions for providing subsequent incremental payments to meeting the monetary  
2 path payment requirement. The certificate holder for a nongenerating facility must meet  
3 its incremental monetary path payment requirements before exhausting its offset credit  
4 account, as described in OAR 345-024-0630(4). In no case shall the applicant diminish  
5 the bond or letter of credit or receive a refund from a qualified organization based on the  
6 calculations of the facility's emissions on a new and clean basis for a fossil-fueled power  
7 plant or any other measure for a nongenerating energy facility. A qualified organization  
8 shall not refund any offset funds to a certificate holder based on the operation or  
9 performance of a non-base load power plant during any five-year period reported under  
10 OAR 345-024-0590(5) or, for a nongenerating facility, on any offset credits the certificate  
11 holder provided under OAR 345-024-0620(5).

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

16 (3) When the certificate holder receives written notice from the qualified organization  
17 certifying that the qualified organization is contractually obligated to pay any funds to  
18 implement offsets using the offset funds, the certificate holder shall make the requested  
19 amount available to the qualified organization unless the total of the amount requested  
20 and any amounts previously requested exceeds the offset funds, in which case the  
21 certificate holder shall make available only the remaining amount of the offset funds.

22 The qualified organization shall use at least 80 percent of the offset funds for contracts  
23 to implement offsets. The qualified organization shall assess offsets for their potential to  
24 qualify in, generate credits in or reduce obligations in other regulatory settings. The  
25 qualified organization may use up to 20 percent of the offset funds for monitoring,  
26 evaluation, administration and enforcement of contracts to implement offsets.

27 (4) At the request of the qualified organization and in addition to the offset funds, the  
28 certificate holder shall pay the qualified organization an amount equal to 10 percent of  
29 the first \$500,000 of the offset funds and 4.286 percent of any offset funds in excess of  
30 \$500,000. The certificate holder for a base load gas plant shall pay not less than  
31 \$50,000, unless the Council specifies a lesser amount in the site certificate. In the site  
32 certificate, the Council may specify a minimum amount that other fossil-fueled power  
33 plants or nongenerating energy facilities must pay. This payment compensates the  
34 qualified organization for its costs of selecting offsets and contracting for the  
35 implementation of offsets.

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

1       (6) For monetary path payments a certificate holder must make before beginning  
2       construction, the certificate holder shall make all offset fund payments and all payments  
3       required by section (4) to the qualifying organization in real dollars of the year in which  
4       the Council issues a final order applying the carbon dioxide emissions standard to the  
5       energy facility. In the site certificate, the Council shall specify an appropriate inflation  
6       index for calculating real dollars. For a non-base load power plant, if a certificate holder  
7       must make a payment as described in OAR 345-024-0600(4), the certificate holder shall  
8       make a payment that has the same present value per ton of carbon dioxide as the  
9       monetary path offset rate of the year in which the Council issued the final order applying  
10      the carbon dioxide standard. In the site certificate, the Council shall specify the  
11      methodology for calculating present value. If the certificate holder of a nongenerating  
12      facility must make payments as described in OAR 345-024-0630(4) and (5), the Council  
13      shall specify in the site certificate the method for calculating the rate for the dollar value  
14      per ton of carbon dioxide required according to subsection (a) or (b) below:

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

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

#### 25 26       **OAR 345-024-0720 Qualified Organization**

27  
28       (1) If the applicant elects to meet the applicable carbon dioxide emissions standard in  
29       whole or in part under OAR 345-024-0560(3), OAR 345-024-0600(3) and (4), or OAR 345-  
30       024-0630(2), (4) and (5), the applicant shall identify the qualified organization. The  
31       applicant may identify an organization that has applied for, but has not received, an  
32       exemption from federal income taxation, but the Council may not find that the  
33       organization is a qualified organization unless the organization is exempt from federal  
34       taxation under section 501(c)(3) of the Internal Revenue Code as amended and in effect  
35       on December 31, 1996.

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

39       (a) The Council shall establish criteria for selection of offsets, based on the reduction  
40       of net carbon dioxide emissions and the criteria set forth in OAR 345-024-0550(3) for  
41       base load plants, OAR 345-024-0590(3) for non-base load power plants and OAR  
42       345-024-0620(3) for nongenerating facilities. The Council may consider the costs of

1 particular types of offsets in relation to the expected benefits of such offsets. In  
2 establishing criteria, the Council shall not require the certificate holder to select  
3 particular offsets and shall allow the certificate holder a reasonable range of choices  
4 in selecting offsets.

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

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

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

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

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

36  
37 (3) Every qualified organization that has received funds under this rule shall, at five-year  
38 intervals beginning on the date of receipt of such funds, provide the Council with the  
39 information the Council requests about the qualified organization's performance. The  
40 Council shall evaluate the information requested and, based on such information, shall  
41 make recommendations to the Legislative Assembly that the Council deems appropriate.

1  
2 IV.S.1. Carbon Dioxide Findings of Fact  
3

4 The applicant provided information about compliance with the Council's Carbon Dioxide  
5 Standard in Exhibit Y of the application. As explained in that exhibit, the proposed facility would  
6 be classified as a "non-base load power plant" as defined in OAR 345-001-0010(40) because the  
7 project would be limited by the site certificate to an average number of hours per year of not  
8 more than 6,600 hours. Under this rule definition, for a plant designed to operate at variable  
9 loads, the facility's annual hours of operation are determined by dividing the actual annual  
10 electric output of the facility in megawatt-hours by the facility's nominal electric generating  
11 capacity in megawatts. The applicant proposes to use only natural gas as fuel for the station.<sup>415</sup>  
12 Because the applicant is proposing to use an alternative method for reclaiming wastewater via  
13 a zero liquid discharge system, this section addresses compliance with the CO2 standard based  
14 upon facility operation with and without the zero liquid discharge system. To apply the  
15 standard, the Council must determine the excess carbon dioxide emissions rate of the energy  
16 facility and the excess carbon dioxide emissions for 30 years.  
17

18 Carbon Dioxide Emissions

19 For a non-base load power plant, the Council must find that the net CO2 emissions rate of the  
20 proposed facility does not exceed 0.675 pounds of carbon dioxide per kilowatt of net electric  
21 power output, with CO2 emissions and net electric power output measured on a 'new and  
22 clean basis,' according to OAR 345-024-0590. Therefore, the Council must determine the gross  
23 carbon dioxide emissions that are reasonably likely to result from the operation of the  
24 proposed facility. For a non-base load power plant, the Council must base this determination on  
25 the proposed design of the facility, the limitation on the hours of generation and the average  
26 site conditions, assuming a 30-year life for the plant, pursuant to OAR 345-001-0010(40).  
27

28 Under to OAR 345-001-0010(38), the Council's definition of 'new and clean basis' specifies  
29 average annual site conditions, including temperature, barometric pressure and relative  
30 humidity. The applicant provided the following average annual site conditions for the Station:  
31

32 Temperature: 53.0 degree Fahrenheit  
33 Barometric Pressure: 14.399 pounds per square inch  
34 Relative Humidity: 64.8 percent<sup>416</sup>  
35

36 According the ASC, the gross carbon dioxide emissions for 30 years' operation at the facility, at  
37 the average conditions listed above, and operating for 4,400 hours per year, were estimated to  
38 be approximately 57,834 million pounds of CO2 with or without a zero liquid discharge  
39 system.<sup>417</sup> The net CO2 emissions rate (lbs CO2/kwh) was estimated to be 1.055 (lbs CO2/kwh)

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<sup>415</sup> ASC, Exhibit Y, Y-6.

<sup>416</sup> ASC, Exhibit Y, Y-5.

<sup>417</sup> ASC, Exhibit Y, Y-4

without a ZLD system and 1.064 (lbs CO<sub>2</sub>/kwh) with a ZLD system. Therefore, the excess CO<sub>2</sub> emissions rate (lbs CO<sub>2</sub>/kWh) without a ZLD system is 0.380 and 0.389 with a ZLD system. The total excess CO<sub>2</sub> emissions for 30 years, at average site conditions and operating at 4,400 hours per year are estimated to be approximately 10.416 million tons or 10.57 million tons of CO<sub>2</sub> with utilization of a zero liquid discharge elimination system.<sup>418</sup>

Table S-1 below breaks down the applicant's carbon dioxide emission factor calculations for normal operation and Table S-2 breaks down the applicant's carbon dioxide emission factor calculations with a ZLD system.

**Table S-1 Carbon Dioxide Emission Factor Calculations without a ZLD System**

<b>A. CO<sub>2</sub> Standard</b>	<b>415 MW of Combustion</b>
CO <sub>2</sub> Standard (lbs CO <sub>2</sub> /kWh)	0.675
<b>B. Parameters for Non-Base Load Gas Plant</b>	
Net Power Output (kW)	415,312
New and Clean Gross Heat Rate (Btu/kWh) HHV	8,781
Annual Hours of Operation	4,400
<b>C. Parameters for Power Augmentation</b>	
Net Power Output (kW)	NA
New and Clean Gross Heat Rate (Btu/kWh) HHV	
Annual Hours of Operation	
<b>D. Calculations</b>	
New Power Output (kW)	415,312
Annual Hours of Operation	4,400
Percent Time on Non-Base Load	50.2%
Net Annual Generation (million kWh/yr)	1,827
Deemed Life of Plant (years) by Statute or Rule	30
Total Gross Plant Output (million kWh for 30 years)	56,223
Total Net Plant Output (million kWh for 30 years)	54,821
Gross Heat Rate (Btu/kWh) HHV	8,781
CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /Btu)	0.00011715
Total Gross CO <sub>2</sub> Emissions (million lbs for 30 years)	57,834
<b>E. Total Operations</b>	
Combined Net Output (million kWh for 30 years)	54,821
Combined CO <sub>2</sub> Emissions (million lbs for 30 years)	57,834

<sup>418</sup> ASC, Exhibit Y, Y-5.

**Table S-1 Carbon Dioxide Emission Factor Calculations without a ZLD System**

Net CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /kWh)	1.055
CO <sub>2</sub> Standard (lbs CO <sub>2</sub> /kWh)	0.675
Excess CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /kWh)	0.380
Excess Tons CO <sub>2</sub> (million tons over 30 years)	10.416
<b>F. Monetary Path</b>	
Offset Fund Rate (\$/ton CO <sub>2</sub> )	\$1.27
Offset Funds Required (\$ million) <sup>419</sup>	\$13.23
Contracting and Selection Funds (\$ million) <sup>420</sup>	\$0.60
<b>Monetary Path Requirement (\$ million)</b>	<b>\$13.83</b>
<b>Key:</b> Btu/kWh = British thermal units per kilowatt hour; CO <sub>2</sub> carbon dioxide; HHV = higher heating value; kW = kilowatt; kWh/yr; kilowatts-hours per year; lbs = pounds; lbs CO <sub>2</sub> /kWh = pounds of carbon dioxide per kilowatt hour; NA = not applicable	

1

**Table S-2 Carbon Dioxide Emission Factor Calculations with a ZLD System**

A. CO <sub>2</sub> Standard	411.9 MW of Combustion Turbines
CO <sub>2</sub> Standard (lbs CO <sub>2</sub> /kWh)	0.675
B. Parameters for Non-Base Load Gas Plant	
Net Power Output (kW)	411,882
New and Clean Gross Heat Rate (Btu/kWh) HHV	8,781
Annual Hours of Operation	4,400
C. Parameters for Power Augmentation	
Net Power Output (kW)	NA
New and Clean Gross Heat Rate (Btu/kWh) HHV	
Annual Hours of Operation	
D. Calculations	
Net Power Output (kW)	411,882
Annual Hours of Operation	4,400
Percent Time on Non-Base Load	50.2%
Net Annual Generation (million kWh/year)	1812.3

<sup>419</sup> To arrive at offset funds required, the applicant multiplied the excess tons of carbon dioxide for the facility by the offset fund rate, \$1.27 per ton of carbon dioxide

<sup>420</sup> Selection and contracting funds are determined by applying the formula in OAR 345-024-0710(4)

**Table S-2 Carbon Dioxide Emission Factor Calculations with a ZLD System**

Deemed Life of Plant (years) by Statute or Rule	30
Total Gross Plant Output (million kWh for 30 years)	56,223
Total Net Plant Output (million kWh for 30 years)	54,368
Gross Heat Rate (Btu/kWh) HHV	8,781
CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /Btu)	0.00011715
Total Gross CO <sub>2</sub> Emissions (million lbs for 30 years)	57,834
<b>E. Total Operations</b>	
Combined Net Output (million kWh for 30 years)	54,368
Combined CO <sub>2</sub> Emissions (million lbs for 30 years.)	57,834
Net CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /kWh)	1.064
CO <sub>2</sub> Standard (lbs CO <sub>2</sub> /kWh)	0.675
Excess CO <sub>2</sub> Emissions Rate (lbs CO <sub>2</sub> /kWh)	0.389
Excess Tons CO <sub>2</sub> (million tons over 30 years)	10.57
<b>F. Monetary Path</b>	
Offset Fund Rate (\$/ton CO <sub>2</sub> )	\$1.27
Offset Funds Required (\$ million) <sup>421</sup>	\$13.42
Contracting and Selection Funds (\$ million) <sup>422</sup>	\$0.60
<b>Monetary Path Requirement (\$ million)</b>	<b>\$14.02</b>
<b>Key:</b> Btu/kWh = British thermal units per kilowatt hour; CO <sub>2</sub> carbon dioxide; HHV = higher heating value; kW = kilowatt; kWh/yr; kilowatts-hours per year; lbs = pounds; lbs CO <sub>2</sub> /kWh = pounds of carbon dioxide per kilowatt hour; NA = not applicable	

1  
2 The estimates of carbon dioxide emission calculations for the proposed facility reflected in  
3 these tables do not necessarily reflect the actual emissions, offsets, or monetary path payments  
4 to be required. The conditions relating to the carbon dioxide standard allow the applicant  
5 flexibility in its choice of equipment vendor and the facility's design, within parameters allowed  
6 pursuant to OAR 345-027-0050. Therefore, pursuant to OAR 345-024-0590(4), before beginning  
7 construction of the facility, the applicant must notify the department in writing of its final  
8 selection of an equipment vendor and must submit a written design information report to the  
9 department sufficient to verify the facility's new and clean heat rate and its nominal electric  
10 generating capacity at average annual site conditions. The department must thereafter use this  
11 information as the basis for calculating the gross carbon dioxide emissions from the facility and

<sup>421</sup> To arrive at offset funds required, the applicant multiplied the excess tons of carbon dioxide for the facility by the offset fund rate, \$1.27 per ton of carbon dioxide

<sup>422</sup> Selection and contracting funds are determined by applying the formula in OAR 345-024-0710(4)



1 the amount of greenhouse gas emissions reduction the applicant must provide under OAR 345-  
2 024-0600. To ensure compliance with these requirements the Council adopts the following  
3 condition:

4  
5 **Condition S.1:** Before beginning construction, the certificate holder shall notify the  
6 department in writing of its final selection of an equipment vendor and shall submit a  
7 written design information report to the department sufficient to verify the facility's  
8 designed new and clean heat rate and its nominal electric generating capacity at average  
9 annual site conditions. The certificate holder shall include the proposed total number of  
10 hours of operation, subject to the limitation that the total annual average number of hours  
11 of operation per year is not more than 6,600 hours. At the time the certificate holder  
12 submits the information required by this condition, the certificate holder shall also specify  
13 its election of method used to measure or calculate carbon dioxide emissions. The election  
14 shall apply for the initial reporting required pursuant to Condition S.8 or S.9, as applicable,  
15 and to each reporting period required pursuant to Condition S.10.

16  
17 Qualified Organization, Offset funds

18 The applicant has elected to comply with the carbon dioxide emissions standard by providing  
19 offset funds to a qualified organization as allowed by OAR 345-024-0600(3) and in compliance  
20 with the monetary path payment requirement of OAR 345-024-0710.<sup>423</sup> The applicant proposes  
21 to provide offset funds and funds for the cost of selecting and contracting for offsets to the  
22 Climate Trust. The Council has previously found that the Climate Trust is a "qualified  
23 organization." The Council finds that The Climate Trust continues to meet the requirements of a  
24 "qualified organization," defined by ORS 469.503(2)(e)(N), for the following reasons:

- 25
- 26 • The Climate Trust is exempt from federal taxation under section 501(c)(3) of the Internal  
27 Revenue Code. By a letter dated November 19, 1997, the Internal Revenue Service  
28 determined that The Climate Trust (then the Oregon Climate Trust) is exempt from  
29 taxation under section 501(c)(3).  
30
  - 31 • The Climate Trust is incorporated in the State of Oregon. The Articles of Incorporation  
32 are filed with the Oregon Secretary of State.  
33
  - 34 • The Articles of Incorporation of The Climate Trust require that offset funds received under  
35 OAR 345-024-0710(3) (ORS 469.503(2)) are to be used for offsets projects that would  
36 result in direct reduction, elimination, sequestration, or avoidance of CO<sub>2</sub> emissions. The  
37 Articles of Incorporation of The Climate Trust require that decisions regarding the use of  
38 such funds be made by a body composed of seven voting members, of which three are  
39 appointed by the Council, three are Oregon residents appointed by the Bullitt Foundation,

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<sup>423</sup> ASC, Exhibit Y, Y-7.

1 and one is appointed by applicants for site certificates that are subject to ORS  
2 469.503(2)(d) and the holders of such site certificates.

- 3
- 4 • The Climate Trust has made available on an annual basis, beginning after the first year of  
5 operation, a signed opinion of an independent certified public accountant stating that the  
6 qualified organization's use of funds pursuant to ORS 469.503 conforms with generally  
7 accepted accounting principles.
- 8
- 9 • The Climate Trust has provided DOE with documentation that the Climate Trust has  
10 complied with OAR 345-001-0010(1)(48)(e) (ORS 469.503(2)(e)(K)(v)).
- 11

#### 12 Monetary Path Payment

13 The combination of offset funds and contracting and selection funds constitutes the monetary  
14 path payment requirement. Using the parameters in the ASC, the tables above provide the  
15 excess tons of carbon dioxide expected to result from operation of the proposed facility  
16 multiplied by the offset fund rate of \$1.27 per ton of carbon dioxide. Based on the ASC, the  
17 offset funds required for the monetary path payment would amount to \$13.83 million for  
18 normal operations and \$14.02 million with a ZLD system, with contracting and selection funds  
19 represented at \$0.60 million.<sup>424</sup>

20

21 Pursuant to ORS 469.503(2)(d) and OAR 345-024-0710(1), if the applicant has elected to  
22 comply with the carbon dioxide emissions standard pursuant to the monetary path payment,  
23 the applicant must provide a bond or letter of credit in a form "reasonably acceptable to the  
24 Council to ensure the payment of the offset funds" and any additional funds required to the  
25 qualifying organization before beginning commencement of construction. Pursuant to OAR 345-  
26 024-0710(4), at the request of the qualified organization, the applicant must pay the qualified  
27 organization an amount equal to 10 percent of the \$500,000 of the offset funds and 4.286  
28 percent of any offset funds in excess of \$500,000. This payment is to compensate the qualified  
29 organization for its costs of selecting offsets and contracting for the implementation of offsets.

30

31 The applicant has requested the option to provide either a bond or letter of credit to secure the  
32 funds it must provide to the qualifying organization. Pursuant to OAR 345-024-0710 (6), for  
33 those monetary path payments the applicant must make before beginning construction, the  
34 applicant must make all offset fund payments and those required to compensate the qualified  
35 organization in selecting offsets and implementing offsets under OAR 345-027-0710(4),  
36 discussed above, to the qualifying organization in real dollars of the year in which the Council  
37 issues the final order for the proposed facility. In order to ensure compliance with the  
38 requirements in OAR 345-024-0590 through 345-024-0710 and to provide the mechanism for  
39 calculating the excess carbon dioxide emissions and the actual monetary path payment, the  
40 Council adopts the following conditions:

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<sup>424</sup> ASC, Exhibit Y, Y-9.

1  
2 **Condition S.2:** For the purposes of this site certificate, “monetary path payment  
3 requirement” means the amount of offset funds determined pursuant to OAR 345-024-  
4 0590 and -600 and the amount of the selection and contracting funds that the certificate  
5 holder must disburse to the Climate Trust, as the qualified organization, pursuant to OAR  
6 345-024-0710 and the site certificate. The certificate holder shall calculate the monetary  
7 path payment using an offset fund rate of \$1.27 per ton of carbon dioxide in 2015 dollars as  
8 follows:  
9

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

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

16 c. The calculation of 2015 dollars shall be made using the same index described in  
17 Condition G.4. The amount of the bond or letter of credit shall increase annually by the  
18 percentage increase in the Index and shall be pro-rated within the year to the date of  
19 disbursement to The Climate Trust from the date of Council approval of the site  
20 certificate. If at any time the Index is no longer published, the Council shall select a  
21 comparable calculation of 2015 dollars without an amendment of the site certificate.  
22

23 **Condition S.3:** To calculate the initial monetary path payment requirement, the certificate  
24 holder shall use the contracted design parameters for capacities and heat rates submitted  
25 under Condition S.1.  
26

27 **Condition S.4:** The certificate holder shall submit all monetary path payment requirement  
28 calculations to the department for verification in a timely manner before submitting a bond  
29 or letter of credit for Council approval, before entering into a Memorandum of  
30 Understanding with The Climate Trust as required by Condition S.5, and before making  
31 disbursement to The Climate Trust. The net carbon dioxide emissions rate of the facility  
32 shall not exceed 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power  
33 output measured on a new and clean basis, as the department may modify such basis  
34 pursuant to Condition S.8(c).  
35

36 **Condition S.5:** Before beginning construction of the facility, the certificate holder must  
37 enter into a Memorandum of Understanding (MOU) with The Climate Trust that establishes  
38 the disbursement mechanism to transfer selection and contracting funds and offset funds  
39 to The Climate Trust.  
40

41 (a) The MOU must be substantially in the form of Appendix E to the final order on the  
42 Application. At the request of the certificate holder, the Council may approve a different

1 form of a bond or letter of credit and concurrent MOU without an amendment of the  
2 site certificate.

3 (b) Either the certificate holder or The Climate Trust may submit to the Council for the  
4 Council's resolution any dispute between the certificate holder and The Climate Trust  
5 concerning the terms of the bond or letter of credit, the MOU or any other issues  
6 related to the monetary path payment requirement. The Council's decision shall be  
7 binding on all parties.  
8

9 **Condition S.6:** Before beginning construction of the facility, the certificate holder shall  
10 submit to the Climate Trust a bond or letter of credit in the amount of the offset funds of  
11 the monetary path payment requirement as determined under Condition S.2.  
12

13 (a) The certificate holder shall use a form of bond or letter of credit that is substantially  
14 in the form of Attachment B to the MOU described in Condition S.5. At the request of  
15 the certificate holder, the Council may approve a different form of a bond or letter or  
16 credit without an amendment of the site certificate.

17 (b) The certificate holder shall use an issuer of the bond or letter of credit approved by  
18 the Council.

19 (c) The certificate holder shall maintain the bond or letter of credit in effect until the  
20 certificate holder has disbursed the full amount of the offset funds to The Climate Trust.  
21 The certificate holder may reduce the amount of the bond or letter of credit  
22 commensurate with payments it makes to The Climate Trust. The bond or letter of  
23 credit must not be subject to revocation before disbursement of the full amount of the  
24 offset funds.  
25

26 When the applicant receives written notice from the qualified organization certifying that the  
27 qualified organization is obligated to pay any funds to implement offsets using the offset funds,  
28 pursuant to OAR 345-024-0710(3), the applicant must make the requested amount available to  
29 the qualified organization. Therefore, the Council adopts the following condition:  
30

31 **Condition S.7:** The certificate holder shall disburse to The Climate Trust offset funds and  
32 selection and contracting funds when requested by The Climate Trust in accordance with  
33 Conditions S.10 and S.11 and the following requirements:  
34

35 (a) The certificate holder shall disburse selection and contracting funds to The Climate  
36 Trust before beginning construction and as appropriate when additional offset funds are  
37 required under Conditions S.10 and S.11.

38 (b) Upon notice pursuant to subsection (c), The Climate Trust may request from the  
39 issuer of the bond or letter of credit the full amount of all offset funds available or it  
40 may request partial payment of offset funds at its sole discretion. Notwithstanding the  
41 specific amount of any contract to implement an offset project, The Climate Trust may

request up to the full amount of offset funds the certificate holder is required to provide to meet the monetary path payment requirement.

(c) The Climate Trust may request disbursement of offset funds pursuant to paragraph (b) by providing notice to the issuer of the bond or letter of credit that The Climate Trust has executed a bond or letter of intent to acquire an offset project. The certificate holder shall require that the issuer of the bond or letter of credit disburse offset funds to The Climate Trust within three business days of a request by The Climate Trust for the offset funds in accordance with the terms of the bond or letter of credit.

#### Monetary Path Payment Adjustment

In the first 12 months of commercial operation of the facility, the certificate holder must perform 100-hour tests, (Year One Tests) to ensure that the plant complies with the carbon dioxide standard on a new and clean basis, as defined in ORS 469.503(2)(e)(G) and OAR 345-001-0010(38). The Year One Test determines the actual heat rate (Year One Heat Rate) and the net electric power output (Year One Capacity) on a new and clean basis for each generating unit. However, pursuant to OAR 345-001-0010(38)(b), the Council may adjust the results for the average temperature, barometric pressure and relative humidity at the site during the times of the year the facility is intended to operate. In addition, 100-hour tests performed for purposes of the applicant's commercial acceptance of the facility may suffice in lieu of testing after beginning commercial operation. To calculate actual gross carbon dioxide emissions, the applicant may, therefore, use the new and clean heat rate and the actual hours of operation or report to the Council the actual measured or calculated carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to the mandatory carbon dioxide emissions reporting requirements. If the actual emissions calculated exceed the projected emissions for that period, additional offsets may be required.

If the results show that the certificate holder must offset additional carbon dioxide emissions, additional selection and contracting funds would also be required. To ensure the facility reports to the Council and provides the necessary offsets based upon the actual gross carbon dioxide emissions, the Council adopts the following conditions:

**Condition S.8:** Except as provided in Condition S.9, within the first 12 months of commercial operation of the facility, the certificate holder shall conduct a 100-hour test (Year One Test). Tests performed for purposes of the certificate holder's commercial acceptance of the facility may suffice to satisfy this condition in lieu of testing after beginning commercial operation.

(a) The certificate holder shall conduct the Year One Test to determine the actual heat rate (Year One Heat Rate) and the net electric power output (Year One Capacity) on a new and clean basis, without degradation, for each generating unit, with the results adjusted for the average annual site condition for temperature, barometric pressure,

1 relative humidity, and operating hours per year. The certificate holder shall use a rate of  
2 117 pounds of carbon dioxide per million Btu of natural gas fuel.

3 (b) The certificate holder shall notify the department at least 60 days before conducting  
4 the tests required in subsection (a) unless the certificate holder and the department  
5 have mutually agreed that less notice will suffice.

6 (c) Before conducting the tests required in subsection (a), the certificate holder shall, in  
7 a timely manner, provide to the department for its approval a copy of the protocol for  
8 conducting the tests. The department may approve modified parameters for testing on  
9 a new and clean basis pursuant to OAR 345-024-0590(1) without a site certificate  
10 amendment. The certificate holder shall not conduct the tests required in subsections  
11 (a) until the department has approved the testing protocols.

12 (d) Within 60 days after completing the Year One Tests, the certificate holder shall  
13 provide to the Council reports of the results of the Year One Tests.

14  
15 **Condition S.9:** If the certificate holder has elected to calculate excess carbon dioxide  
16 emissions based on direct measurements, then the Year One Test described in Condition S.8  
17 is not required.

18  
19 (a) If the Year One Test is not performed, the certificate holder must report carbon  
20 dioxide emissions using actual measured emissions as reported to the Department of  
21 Environmental Quality or the U.S. Environmental Protection Agency for all subsequent  
22 five year periods over the life of the facility and may not change its election to report  
23 based on new and clean heat rate in any subsequent five year period.

24 (b) If the Year One Test is not performed pursuant to Condition S.8, then the certificate  
25 holder shall report the facility's net kWh generation and actual measured carbon  
26 dioxide emissions for the 12 month period following start of commercial operation. The  
27 certificate holder shall report the net kWh generation and actual carbon dioxide  
28 emissions for this period to the department within two months of the end of the first 12  
29 month period. The certificate holder shall use the net kWh generation and measured  
30 carbon dioxide emissions to perform the calculations to determine if a supplemental  
31 monetary path payment is needed as set forth in Condition S.10. The certificate holder  
32 shall submit these calculations to the department for verification.

33  
34 **Condition S.10:** Based on the data from the Year One Tests described in Condition S.8, or  
35 actual measured emissions described in Condition S.9, the certificate holder shall calculate  
36 an adjusted monetary path payment. The certificate holder shall submit its calculations to  
37 the department for verification. If the adjusted amount exceeds the amount of the bond or  
38 letter of credit provided according to Condition S.7 before beginning construction, the  
39 certificate holder shall fully disburse the excess amount directly to The Climate Trust within  
40 30 days of the department's verification of the calculations.

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

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

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

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

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

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

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

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

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

#### Modifications

OAR 345-027-0050 provides:

*(2) A site certificate amendment is not required if a proposed change in the design, construction or operation of a facility is in substantial compliance with the terms and conditions of the site certificate and is a change:*

*(a) To an electrical generation facility that would increase the electrical generating capacity and would not increase the number of electric generators at the site, change fuel type, increase fuel consumption by more than 10 percent, or enlarge the facility site.*

Under OAR 345-027-0050(5), the certificate holder may request a determination by the department that an amendment is not required, based on information provided by the certificate holder about how proposed changes would comply with applicable standards. Under OAR 345-027-0050(2)(a), a site certificate amendment is not required for incremental increases in generating capacity that “would not increase the number of electric generators at the site, change fuel type, increase fuel consumption by more than 10 percent, or enlarge the facility site.” If a certificate holder had not yet made monetary path requirement funds available to a qualified organization, it might take advantage of the flexibility that OAR 345-027-0050(2)(a) offers when it certifies the capacity and heat rate of the facility. However, an



1 increase in capacity and heat rate after a certificate holder has already complied with the  
2 conditions relating to the carbon dioxide standard might require an amendment if the change  
3 in capacity and heat rate resulted in an increase in the monetary path payment requirement. In  
4 order to allow for a modification of the monetary path payment requirement without an  
5 amendment of the site certificate for incremental increases that otherwise fall within the limits  
6 specified in OAR 345-027-0050(2)(a) after a certificate holder has already complied with the  
7 conditions relating to the carbon dioxide standard before beginning construction, the Council  
8 adopts the following condition:  
9

10 **Condition S.12:** After the certificate holder has complied with the conditions relating to the  
11 carbon dioxide standard before beginning construction, incremental increases in capacity  
12 and heat rate that otherwise fall within the limits specified in OAR 345-027-0050(2) do not  
13 require an amendment of the site certificate if the certificate holder complies substantially  
14 with Conditions S.1 through S.11, except as modified below, and if:  
15

16 (a) The department or the Council determines, as described in OAR 345-027-0050(5),  
17 that the proposed change in the facility does not otherwise require an amendment; and  
18

19 (b) The certificate holder complies with the appropriate carbon dioxide emissions  
20 standard and monetary offset rate in effect at the time the department or the Council  
21 makes its determination under this condition.  
22

23 Based on the evidence provided by the applicant and subject to compliance with the site  
24 certificate  
25 conditions, the Council finds that the construction and operation of the facility would meet the  
26 standards and means of compliance for non-base load power plants required in OAR 345-024-  
27 0590 and OAR 345-024-0600, and the monetary path payment requirements of OAR 345-024-  
28 0710.  
29

#### 30 **IV.S.2. Carbon Dioxide Standard: Conclusions of Law**

31

32 Based on the foregoing findings and the evidence in the record, and subject to compliance with  
33 the site certificate conditions, the Council finds that the facility complies with the Council's  
34 Carbon Dioxide Standard.  
35

#### 36 **VI. FINAL CONCLUSIONS AND ORDER**

37

38 The applicant has submitted an application to construct a natural gas energy facility with an  
39 electric generating capacity of 415 megawatts. The Council finds that a preponderance of  
40 evidence on the record supports the following conclusions:  
41

1 1.) The Perennial Wind Chaser Station complies with the requirements of the Oregon  
2 Energy Facility Siting Statutes, ORS 469.300 to 469.520.

3  
4 2.) The Perennial Wind Chaser Station complies with the standards adopted by the  
5 Council pursuant to ORS 469.501.

6  
7 3.) The Perennial Wind Chaser Station complies with all other Oregon statutes and  
8 administrative rules identified in the project order as applicable to the issuance of a site  
9 certificate for the proposed facility.

10  
11 Based on the findings of fact, reasoning, site certificate conditions and conclusions of law in this  
12 final order, the Council concludes that the applicant has satisfied the requirements for issuance  
13 of a site certificate for the Perennial Wind Chaser Station, subject to the conditions set forth in  
14 this final order.

15 Issued this 18<sup>th</sup> day of September, 2015.

Energy Facility Siting Council

By:   
Barry Beyeler  
Chair, Energy Facility Siting Council

Appendix A  
Perennial Wind Chaser Station  
Site Certificate Conditions

## **A. General Standards of Review Conditions:**

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

**Condition A.2:** The certificate holder shall complete construction of the facility within six years after the effective date of the site certificate.

**Condition A.3 [OAR 345-027-0020(2)]:** The certificate holder shall submit a legal description of the site to the Oregon Department of Energy within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility.

**Condition A.4 [OAR 345-027-0020(3)]:** The certificate holder shall design, construct, operate, and retire the facility:

- (a) Substantially as described in the site certificate;
- (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the site certificate is issued; and
- (c) In compliance with all applicable permit requirements of other state agencies.

**Condition A.5 [OAR 345-027-0020(4)]:** The certificate holder shall begin and complete construction of the facility by the dates specified in the site certificate.

**Condition A.6 [OAR 345-027-0020(5)]:** Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, “construction rights” means the legal right to engage in construction activities. For wind energy facilities, transmission lines or pipelines, if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line or pipeline occurs during the certificate holder’s negotiations to acquire construction rights on another part of the site.

**Condition A.7 [OAR 345-027-0020(6)]:** If the certificate holder becomes aware of a significant environmental change or impact attributable to the facility, the certificate holder shall, as soon as possible, submit a written report to the department describing the impact on the facility and any affected site certificate conditions.

**Condition A.8 [OAR 345-027-0020(11)]:** Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility.

**Condition A.9 [OAR 345-027-0020(15)]:** Before any transfer of ownership of the facility or ownership of the site certificate holder, the certificate holder shall inform the department of the proposed new owners. The requirements of OAR 345-027-0100 apply to any transfer of ownership that requires a transfer of the site certificate.

**Condition A.10 [OAR 345-027-0023(2)]:** The certificate holder shall submit to the department copies of all incident reports involving the pipeline required under 49 CFR § 191.15.

**Condition A.11 [OAR 345-027-0023(3)]:**

- (a)The certificate holder shall 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, in effect as of the date of this rule; and
- (b)The certificate holder shall develop and implement a program using the best available practicable technology to monitor the proposed lateral natural gas pipeline to ensure protection of public health and safety.

## **B. Organizational Expertise Standard**

**Condition B.1:** Before beginning construction, the certificate holder shall provide the department with the identity and qualifications of the design, engineering and construction contractor(s) for the facility. The certificate holder shall select contractors that have substantial experience in the design, engineering and construction of similar facilities. The certificate holder shall report to the department any change in contractors during the design and construction of the facility.

**Condition B.2:** The certificate holder must notify the department before conducting any work on the site that does not qualify as surveying, exploration, or other activities to define or characterize the site. The notice must include a description of the work and evidence that its value is less than \$250,000 or evidence that the applicant has satisfied all conditions that are required prior to beginning construction.

**Condition B.3:** The certificate holder shall contractually require all construction contractors and subcontractors involved in the construction of the facility to comply with all applicable laws and regulations and with the terms and conditions of the site certificate. Such contractual provisions shall not relieve the certificate holder of responsibility under the site certificate.

**Condition B.4:** Any matter of non-compliance under the site certificate is the responsibility of the certificate holder. Any notice of violation issued under the site certificate shall be levied on the certificate holder.

**Condition B.5 [OAR 345-027-0020(7)]:** The certificate holder shall prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

**Condition B.6:** The certificate holder shall obtain all necessary federal, state and local permits or approvals required for construction, operation and retirement of the facility or ensure that its contractors obtain the necessary federal, state and local permits or approvals.

**Condition B.7:** Before beginning construction, the certificate holder shall provide confirmation in writing to the department that the third parties have obtained all necessary permits or approvals and shall provide to the department proof of agreements between the certificate holder and the third parties regarding access to the resources or services secured by the permits or approvals.

## **C. Structural Standard**

**Condition C.1:** Prior to beginning construction, the certificate holder shall complete additional geotechnical investigations, including field explorations and laboratory testing. The field explorations shall include additional borings for the final locations of the turbine/generators, access bridge, step-up substation, transmission towers and the buried transmission cable. Further, the site certificate holder shall perform a shear wave velocity measurement at the station and step-up substation sites.

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

- (a) Refining the seismic hazard evaluations and ground motion design parameters, including design response spectra.
- (b) Estimating soil bearing capacity and settlement for the transformer foundation transmission tower foundation, and other geotechnical evaluations based upon the final design layout and design loads
- (c) Developing geotechnical recommendations for trench excavation, shoring, and backfill of the buried transmission cable, as well as trenchless excavation techniques, if necessary to pass below existing railroad tracks.
- (d) Completing a final geotechnical design report

**Condition C.3:** The certificate holder shall design the facility to resist ground shaking from an event with a 2,475-year recurrence interval. All structures shall be designed in accordance with the Oregon Structural Special Code (2010) and the 2009 International Building Code.

**Condition C.4:** Prior to beginning construction, the certificate holder shall submit a written plan, subject to approval by the department, for implementing soil improvement techniques identified in the geotechnical evaluation.

**Condition C.5 [OAR 345-027-0020(12)]:** The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule, “seismic hazard” includes ground shaking, landslide, liquefaction, lateral spreading, tsunami inundation, fault displacement and subsidence.

**Condition C.6 [OAR 345-027-0020(13)]:** The certificate holder shall notify the department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if site investigations or trenching reveal that conditions in the foundation rocks differ significantly from those described in the application for a site certificate. After the department receives the notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division and to propose mitigation actions.

**Condition C.7 [OAR 345-027-0020(14)]:** The certificate holder shall notify the department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site.

#### **D. Soil Protection**

**Condition D.1:** The certificate holder shall conduct all construction work in compliance with an Erosion and Sediment Control Plan (ESCP) satisfactory to the Oregon Department of Environmental Quality and as required under the National Pollutant Discharge Elimination Systems (NPDES) #1200-C Construction Stormwater Discharge General Permit. The certificate holder shall include in the ESCP any measures necessary to meet local erosion and sediment control requirements or stormwater management requirements.

**Condition D.2:** During construction, the certificate holder must implement best management practices to control dust generated by construction activities, such as applying water to roads and disturbed soil areas.

**Condition D.3:** To control the introduction and spread of noxious weeds, the certificate holder must implement the requirements of the approved Revegetation and Noxious Weed Control Plan during all phases of construction and operation of the facility. Amendments to the Revegetation and Noxious Weed Control Plan must be reviewed and approved by the Umatilla County Weed Control Board and submitted to the department no later than 30 days after approval.

**Condition D.4:** If herbicides are determined necessary, the certificate holder shall contract with a licensed contractor to prescribe and apply the proper treatments. Additionally, the certificate holder shall coordinate with each individual landowner prior to the application of specific herbicides. The certificate holder shall submit to the department evidence of consultation with the landowners prior to application of the herbicides and evidence of a contract with a licensed contractor.

**Condition D.5:** During construction, the certificate holder shall limit truck traffic to improved road surfaces. Within 60 days of completing construction, the applicant shall mitigate any areas of soil compaction by measures to include scarification and reseeded.

**Condition D.6:** The certificate holder shall develop and implement a Hazardous Materials Management and Monitoring Plan (the Plan), which shall include and maintain a Materials Safety Data sheet for all hazardous chemicals stored onsite. The Plan shall contain best management practices and hazardous waste training for construction and operation personnel. The certificate holder shall submit a copy of this plan to the department for review and approval prior to the commencement of construction of the facility.

**Condition D.7:** Prior to operation, the certificate holder shall develop a Spill Prevention Control and Countermeasure Plan for implementation during the facility's operation. The certificate holder shall submit a copy of this plan to the department prior to commencement of operation of the Station.

**Condition D.8:** If a reportable release of hazardous material occurs during construction or operation of the facility, the certificate holder shall notify the department within 72 hours of the occurrence, clean up the release, and dispose of any contaminated soil or other materials according to applicable regulations. The certificate holder shall make spill control and containment kits readily available in areas containing fuel oil, lubricating oil, hydraulic oil, and chemicals, as well as chemical unloading areas. The spill kits shall be equipped with sorbent pads, diatomaceous earth, shovels and appropriate hand tools, curtain booms if working near open water, personal protection equipment, and temporary waste disposal containers.

**Condition D.9:** During construction of the facility, the certificate holder must complete the following monitoring to ensure that there are no significant potential adverse impacts to soils:

- (a) During construction, the certificate holder shall monitor disturbed area erosion and sediment control measures at the active construction areas on a weekly basis and every two weeks on inactive areas. Inspection of both active and inactive areas must occur at least daily during periods when 0.5 inches or more rain has fallen in a 24-hour period.
- (b) The certificate holder must remove trapped sediment when storage capacity has been reduced by 50 percent. Sediments shall be placed in an upland area certified by a qualified wetlands specialist.



(c) If the erosion and sediment control measures are deemed ineffective, different strategies and/or measures shall be implemented, maintained and monitored after consultation with the department.

(d) After completing construction in an area, the certificate holder must monitor the area until soils are stabilized and evaluate whether construction-related impacts to soils are being adequately addressed by the mitigation procedures described in the Erosion and Sediment Control Plan and the Revegetation and Noxious Weed Control Plan. As necessary, the certificate holder must implement follow-up restoration measures such as scarification and reseedling to address those remaining impacts.

## **E. Land Use**

**Condition E.1:** The certificate holder shall utilize fire retardant treated or non-combustible materials for all structures and fencing at the facility. In addition, the site shall be maintained clear of combustible materials within 20 feet of structures, except as necessary for Station operation. The certificate holder shall ensure that trees and other vegetation do not grow to become a fire hazard.

**Condition E.2:** The certificate holder shall design and construct all facility structures and buildings in compliance with the setback requirements of Umatilla County Development Ordinance Section 152.063(B), (C), (E) in effect as of April 03, 2014.

**Condition E.3:** The certificate holder shall consult with the Oregon Department of Fish and Wildlife and the local Soil and Water Conservation District for any minor drainage improvements necessary to ensure effective drainage on surrounding agricultural lands.

**Condition E.4:** To reduce the visual impacts of the facility, the certificate holder shall:

- (a) Not allow any advertising to be used on any part of the facility;
- (b) Use only those signs required for facility safety, required by law or otherwise required by this site certificate, except that the certificate holder may erect directional signage for deliveries and site circulation;
- (c) Design signs in accordance with Umatilla County design requirements for signs as described in UCDC Section 152.545; and
- (d) Maintain any signs allowed under this condition in good repair.

**Condition E.5:** Prior to beginning construction, the certificate holder shall obtain all required land use approvals from Umatilla county as listed in the letter from the Umatilla County Board of Commissioners dated May 14, 2015, and shall submit all associated applications and pay all associated application fees.

## **F. Protected Areas**

No conditions required

## **G. Retirement and Financial Assurance**

**Condition G.1 [OAR 345-027-0020(9)]:** The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the facility. The certificate holder shall retire the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay the actual cost to restore the site to a useful, non-hazardous condition at the time of retirement, notwithstanding the Council's approval in the site certificate of an estimated amount required to restore the site.

**Condition G.2 [OAR 345-027-0020(16)]:** If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council shall notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-027-0020(8), and Condition G.4, to restore the site to a useful, non-hazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall pay any additional cost necessary to restore the site to a useful, non-hazardous condition. After completion of site restoration, the Council shall issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan.

**Condition G.3 [OAR 345-027-0020(8)]:** Before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non-hazardous condition. The certificate holder shall maintain a bond or letter of credit in effect at all times until the facility has been retired. The Council may specify different amounts for the bond or letter of credit during construction and during operation of the facility.

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

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

(b) The certificate holder shall adjust the amount of the bond or letter of credit using the following calculation:

i. Adjust the amount of the bond or letter of credit (expressed in second quarter 2013 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 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 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.

## **H. Fish and Wildlife**

**Condition H.1:** Before beginning construction, the certificate holder shall provide the department and Oregon Department of Fish and Wildlife (ODFW) a detailed map of the facility site, showing all project components, and a table showing the acres of temporary habitat impacted by habitat category and subtype and the acres of permanent habitat impacted by habitat category and subtype. The maps of the facility site shall indicate the habitat categories of all areas that will be affected during construction. In classifying the affected habitat into habitat categories, the certificate holder shall consult with ODFW. The certificate holder shall not begin ground disturbance in an affected area until the habitat assessment has been approved by the department, in consultation with ODFW. The certificate holder shall not construct any facility components within areas of Category 1 habitat and shall avoid temporary disturbance of Category 1 habitat.

**Condition H.2:** Prior to commencement of construction, following completion of condition H.1, the certificate holder shall consult with the Oregon Department of Fish and Wildlife (ODFW) to determine the final acreage of habitat mitigation required. Mitigation shall be provided in accordance with the final acreage determinations provided in response to Condition H.1 and consistent with a Habitat Mitigation Plan, if determined necessary, approved by the department and ODFW

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

(b) The final Habitat Mitigation Plan, if necessary, may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such amendments may be made without amendment of the site certificate. The Council authorizes the department to agree to amendments to this plan. The department shall notify the Council of the Final Habitat Mitigation Plan and all amendments to the plan. The Council retains the authority to approve, reject or modify any amendments of this plan agreed to by the department.

**Condition H.3:** The certificate holder shall restore all areas temporarily impacted due to construction to pre-construction condition or better after construction has been completed.

**Condition H.4:** Before beginning construction, the certificate holder shall prepare a final Project Restoration Monitoring Plan and Project Biological Monitoring Plan in consultation with the department and Oregon Department of Fish and Wildlife (ODFW).

(a) The final plans and ODFW's concurrence must be submitted to the department no less than 30 days prior to the beginning of construction. The certificate holder shall implement the requirements of the approved plan during all phases of construction and operation of the facility, as applicable.

(b) The plans may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such amendments may be made without amendment to the site certificate. The Council authorizes the department to agree to amendments of this plan; however, the Council retains the authority to approve, reject or modify any amendment of this plan agreed to by the department.

**Condition H.5:** Prior to commencing construction, all project personnel shall attend an environmental training session conducted by the certificate holder. The training shall include, but not be limited to, the following topics: identification of approved project boundaries and access roads; identification of sensitive wetland and waterbody resources; identification of special status-plant and wildlife species; techniques regarding avoidance and minimization measures the certificate holder will implement; the role of the onsite biologist; the notification process to be followed if new sensitive resources are identified.

**Condition H.6:** The certificate holder shall design, construct, maintain and operate the reconducted transmission line following the current Avian Power Line Interaction Committee guidelines to minimize risk of avian mortality.

**Condition H.7:** The certificate holder shall restrict vehicular travel along the transmission line and pipeline to the right of way (ROW) and other established areas within the construction, access or maintenance easements. Additionally, the certificate holder shall impose speed limits

during construction for access roads to reduce dust emissions, maintain safety and protect wildlife.

**Condition H.8:** During all years in which construction occurs, if construction related activities occur during the raptor breeding season (February 1 through August 31), the certificate holder must conduct pre-construction surveys within 0.5 miles of all proposed project features for Ferruginous Hawk nests, and within 0.25 miles for all other raptor species nests, including burrowing owl burrows. If active nests are located, the certificate holder shall notify the department and the Oregon Department of Fish and Wildlife (ODFW), and construction-related activities must be restricted within 0.5 miles of Ferruginous Hawk nests and 0.25 miles of all other raptor nests until the nests have failed or chicks have fledged. A biologist shall monitor the status of the active nests daily during nearby active construction and document potential adverse interactions with the project.

**Condition H.9:** During all years in which construction occurs, if construction-related activities occur during the migratory bird breeding season (March 15 through April 15), pre-construction surveys must be conducted within 20 feet of all proposed project features for nests of all native, non-raptor species. Pre-construction nest surveys for non-raptors shall be valid for only two weeks. If active nests are located, the certificate holder must notify the department and consult with Oregon Department of Fish and Wildlife (ODFW) to determine appropriate avoidance and/or mitigation measures necessary. A biologist must monitor the status of active nests daily during nearby active construction and document potential adverse interactions with the project.

**Condition H.10:** If a California myotis roost is observed during other biological surveys, the certificate holder must notify the department and consult with Oregon Department of Fish and Wildlife (ODFW) to determine any appropriate avoidance or mitigation measures necessary.

**Condition H.11:** If construction is to occur during important times (breeding season for Ferruginous Hawks and other raptors or migration for all native non-raptors), or at close distances to environmentally sensitive areas (nests of the above), prior to any construction activities, the certificate holder must consult with Oregon Department of Fish and Wildlife (ODFW) to determine appropriate measures to take and guidance on seasonal and/or spatial restrictions to avoid or minimize impact.

**Condition H.12:** The certificate holder shall provide the department and the Oregon Department of Fish and Wildlife (ODFW) with a written summary of all results of biological preconstruction surveys, including nest surveys, within 10 days of survey completion.

**Condition H.13:** The certificate holder shall clearly demarcate boundaries of environmentally sensitive areas (nests referred to in Condition H.11) during construction to increase visibility to construction crews.

## **I. Threatened and Endangered Species**

**Condition I.1:** The certificate holder shall establish streamside management zones within 50 feet of both sides of intermittent and perennial streams and along margins of bodies of open water where removal of low-lying vegetation is minimized.

**Condition I.2:** Prior to beginning construction, the site certificate holder shall survey for northern sagebrush lizard in areas of sagebrush and other shrubby habitat to be impacted by ground disturbing activities. If northern sagebrush lizards are discovered, the site certificate holder shall contact and consult Oregon Department of Fish and Wildlife (ODFW) and the department to determine appropriate measures to avoid or minimize adverse effects, including spatial restrictions. Construction activities shall be restricted until consultation with ODFW has occurred.

**Condition I.3:** Prior to beginning construction, the site certificate holder shall examine any structures within the construction corridor for bat roosts. If any bat roosts are discovered, construction shall be restricted and the site certificate holder shall consult with Oregon Department of Fish and Wildlife and the department to determine appropriate measures to avoid and/or minimize adverse effects.

**Condition I.4:** Prior to beginning construction, the site certificate holder shall conduct pre-construction surveys for Washington Ground Squirrels (WGS) in any areas with suitable habitat, using a qualified professional biologist that has experience in detection of WGS. The certificate holder shall provide written reports of the surveys to the department and the Oregon Department of Fish and Wildlife (ODFW). If any project components that require ground disturbance are located within 1,000 feet of potential WGS habitat (excluding tilled agricultural land or developed areas as it is not suitable for WGS foraging or burrowing), the site certificate holder shall conduct transect surveys to determine if squirrels are present. If WGS are present within the 1,000 foot-buffer, the certificate holder shall identify the boundaries of the Category 1 WGS habitat in the report to the department and ODFW and construction shall be restricted until appropriate measures are determined, which shall include but not be limited to WGS habitat marking with high visibility flagging or markers.

**Condition I.5:** The site certificate holder shall conduct pre-construction surveys for Robinson's onion and Laurence's milkvetch prior to conducting any ground-disturbing activities in areas with suitable habitat. If any plants are discovered, the site certificate holder shall consult with the Oregon Department of Agriculture and the department for guidance on appropriate measures to avoid or minimize adverse effects.

## **J. Scenic Resources**

**Condition J.1:** The certificate holder shall paint or otherwise finish the facility structures in neutral colors with a low reflectivity finish to provide visual integration with the surrounding landscape.

**Condition J.2:** The certificate holder shall not use exterior nighttime lighting except:

- (1) The minimum exhaust stack lighting required or recommended by the Federal Aviation Administration;
- (2) Safety and security lighting at the Station and step-up substation, provided that such lighting is shielded or downward directed to reduce offsite glare; and
- (3) Minimum lighting necessary for repairs or emergencies.

**Condition J.3:** For the new poles required for the transmission infrastructure, the certificate holder shall use poles similar in height and appearance to the existing poles within the transmission line right-of-way.

## **K. Historic, Cultural, and Archaeological Resources**

**Condition K.1:** Prior to construction, the certificate holder shall contact and coordinate with each owner/operator of the identified NRHP eligible historic period resources to obtain any necessary easements or approvals. The certificate holder shall ensure that a qualified archaeologist, as defined in OAR 736-051-0070, instructs construction personnel in the identification and avoidance of accidental damage to identified resources. Records of such training shall be maintained at the administration/control building and made available to authorized representatives of the department upon request.

**Condition K.2:** Before beginning construction, the certificate holder shall provide to the department a map showing the final design locations of all components of the facility, the areas that would be temporarily disturbed during construction and the areas that were surveyed in 2013.

**Condition K.3:** The certificate holder shall cease all ground disturbing activities in the immediate area if any archaeological or cultural resources are found during construction of the facility. The certificate holder shall flag or mark the area and shall notify the department and the Oregon State Historic Preservation Office (SHPO) of the find. A qualified archaeologist shall evaluate the significance of the find. If SHPO determines that the resource is significant, the certificate holder shall make recommendations to the Council for mitigation, including avoidance, field documentation, and data recovery, in consultation with the department, SHPO, interested tribes and other impacted parties. The certificate holder shall not restart work in the affected area until the certificate holder has demonstrated to the Council that it has complied with the archaeological resource protection regulations.

**Condition K.4:** The certificate holder must employ qualified personnel to conduct field investigations of the section of the project's natural gas pipeline right of way not previously

surveyed, prior to construction in that area. The certificate holder shall provide a written report of the field investigation to the department and Oregon State Historic Preservation Office (SHPO). If potentially significant historic, cultural or archaeological sites are found during the field investigations, the certificate holder must instruct all construction personnel to avoid the identified sites and must implement appropriate measures to protect the site, including the measures described in Condition K.3.

#### **L. Recreation Areas**

No conditions required

#### **M. Public Services**

**Condition M.1:** During construction of the facility, the certificate holder shall implement the following measures:

- (a) The certificate holder shall mount a right-turn prohibition sign with a supplemental “TRUCKS” rider plaque facing the westbound (driveway) approach;
- (b) The certificate holder shall mount a left-turn prohibition sign with a supplemental “TRUCKS” rider plaque facing the southbound (Westland Road) approach;
- (c) Prior to truck delivery of any oversize loads, a formal routing and delivery plan shall be developed by the certificate holder in conjunction with the department, in consultation with the Oregon Department of Transportation and Umatilla County; and
- (d) The certificate holder shall locate and maintain landscaping, and signing around aboveground utilities so that adequate sight distance is maintained.

**Condition M.2:** Before beginning construction of any new road approaches or utility crossings, the certificate holder shall obtain all required permits from Umatilla County.

**Condition M.3:** Upon completion of construction, the certificate holder shall restore public roads to pre-construction conditions or better to the satisfaction of the Umatilla County Public Works Department.

**Condition M.4:** Prior to beginning construction, the certificate holder shall enter into a development agreement with Umatilla County to provide roadway and access improvements recommended by the Umatilla County Public Works Director in conjunction with construction and operation of the energy facility and to pay the certificate holder’s proportionate share of Umatilla County’s costs of implementing measures to address fogging and icing on County roads potentially impacted by the operation of the energy facility.

**Condition M.5:** Before beginning construction, the certificate holder shall submit Notice(s) of Proposed Construction or Alteration to the Federal Aviation Administration and the Oregon Department of Aviation. The certificate holder shall promptly notify the department of the responses from the FAA and the Oregon Department of Aviation.



**Condition M.6:** The site certificate holder shall fence the Station site and include a monitored gated entrance, security lighting and a closed circuit television camera shall be installed.

**Condition M.7:** Prior to beginning construction, the certificate holder shall develop and implement a fire protection system, which shall include a fire water system, portable fire extinguishers, a smoke detection system and a carbon dioxide extinguishing system provided with the combustion turbine generators (CTG).

**Condition M.8:** Prior to beginning operation of the facility, the certificate holder shall provide a site plan to the Hermiston Fire & Emergency Services District. The certificate holder shall indicate the actual location of all facility structures on the site plan. During operation, the certificate holder shall ensure that appropriate fire protection agency personnel have an up-to-date list of the names and telephone numbers of facility personnel available to respond on a 24-hour basis in case of an emergency on the facility site.

## **N. Waste Minimization**

**Condition N.1:** The certificate holder shall implement a waste management plan during construction that includes but is not limited to the following measures:

- (a) Recycling steel, other metal scrap; and paper and cardboard waste;
- (b) Recycling wood waste to the maximum extent possible;
- (c) Collecting nonrecyclable waste for transport to a permitted solid waste disposal facility by a licensed waste hauler; and
- (d) Segregating all hazardous waste such as used oil, oily rags and oil-absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for recycling or disposal by a licensed firm qualified in the proper recycling or disposal of hazardous waste.

**Condition N.2:** The site certificate holder shall implement a waste management plan during operation that includes but is not limited to the following measures:

- (a) Training employees to minimize and recycle solid waste;
- (b) Recycling paper products, metals, glass, and plastics;
- (c) Recycling used oil and hydraulic fluid;
- (d) Collecting nonrecyclable waste for transport to a permitted solid waste disposal facility by a licensed waste hauler; and
- (e) Segregating all hazardous waste such as used oil, oily rags and oil absorbent materials, mercury-containing lights and lead-acid and nickel-cadmium batteries for recycling or disposal by a licensed firm qualified in the proper recycling or disposal of hazardous waste.

**Condition N.3:** The certificate holder shall provide portable toilets for on-site sewage handling during construction and shall ensure that they are pumped and cleaned regularly by a licensed contractor who is qualified to pump and clean portable toilet facilities.

**Condition N.4:** The certificate holder shall use hazardous materials in a manner that protects public health, safety and the environment and shall comply with all applicable local, state, and federal environmental laws and regulations.

**Condition N.5:** The certificate holder shall collect all hazardous solid waste, including oily waste, used filters, and oily rags or absorbents in sealable drums. The certificate holder shall collect used oils, solvents, and cleaning materials in tanks or barrels supplied by material vendors.

**Condition N.6:** The certificate holder shall store hazardous chemicals in aboveground containers or tanks located within secondary containment areas. Other chemicals and lubricants needed for facility maintenance and operation shall be stored in the facility buildings

## **O. Transmission Line**

### **Condition O.1 [OAR 345-027-0023(4)]:**

- (a) The certificate holder shall design, construct and operate the transmission line in accordance with the requirements of the National Electrical Safety Code (American National Standards Institute, Section C2, 1997 Edition); and
- (b) The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line.

## **P. Noise**

**Condition P.1:** Prior to beginning construction of the facility, the certificate holder shall re-run the noise model using the noise characteristics of the equipment that has been selected to ensure compliance with the noise regulations.

**Condition P.2:** Upon written notification from the department, the certificate holder shall monitor and record the actual statistical noise levels during operations to verify that the certificate holder is operating the facility in compliance with the noise control regulations. The monitoring plan must be reviewed and approved by the department prior to implementation. The cost of such monitoring, if required, will be borne by the certificate holder.

**Condition P.3:** During operation, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall notify the department within 15 days of receiving a complaint about noise from the facility. The notification should include the date the complaint was received, the nature of the complaint, the complainant's contact information, the location of the affected property, and any actions taken, or planned to be taken, by the certificate holder to address the complaint.

**Condition P.4:** To reduce construction noise impacts at nearby residences, the certificate holder shall:

- (a) Confine the noisiest operation of heavy construction equipment to the daylight hours to the extent practicable;
- (b) Require contractors to install and maintain exhaust mufflers on all combustion engine-powered equipment; and
- (c) Establish a complaint response system at the construction manager's office to address noise complaints. Records of noise complaints during construction must be made available to authorized representatives of the Department of Energy upon request.

#### **Q. Removal-Fill**

No conditions required

#### **R. Ground Water**

**Condition R.1:** The certificate holder shall enter into a contract with the owners of the Regional Water System to ensure completion of system improvements needed in order to provide water to the facility.

**Condition R.2:** During construction and operation of the facility, the certificate holder shall limit use of water obtained from the Port of Umatilla to no more than 2,000 gallons per minute and to amounts found to be within the scope of the water rights held by the Port.

#### **S. Carbon Dioxide Emissions**

**Condition S.1:** Before beginning construction, the certificate holder shall notify the department in writing of its final selection of an equipment vendor and shall submit a written design information report to the department sufficient to verify the facility's designed new and clean heat rate and its nominal electric generating capacity at average annual site conditions. The certificate holder shall include the proposed total number of hours of operation, subject to the limitation that the total annual average number of hours of operation per year is not more than 6,600 hours. At the time the certificate holder submits the information required by this condition, the certificate holder shall also specify its election of the method used to measure or calculate carbon dioxide emissions. The election shall apply for the initial reporting required pursuant to Condition S.8 or S.9, as applicable, and to each reporting period required pursuant to Condition S.10.

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

certificate. The certificate holder shall calculate the monetary path payment using an offset fund rate of \$1.27 per ton of carbon dioxide in 2015 dollars as follows:

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

**Condition S.3:** To calculate the initial monetary path payment requirement, the certificate holder shall use the contracted design parameters for capacities and heat rates submitted under Condition S.1.

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

**Condition S.5:** Before beginning construction of the facility, the certificate holder must enter into a Memorandum of Understanding (MOU) with The Climate Trust that establishes the disbursement mechanism to transfer selection and contracting funds and offset funds to The Climate Trust.

- (a) The MOU must be substantially in the form of Appendix E to the final order on the Application. At the request of the certificate holder, the Council may approve a different form of a bond or letter of credit and concurrent MOU without an amendment of the site certificate.
- (b) Either the certificate holder or The Climate Trust may submit to the Council for the Council's resolution any dispute between the certificate holder and The Climate Trust concerning the terms of the bond or letter of credit, the MOU or any other issues related to the monetary path payment requirement. The Council's decision shall be binding on all parties.

**Condition S.6:** Before beginning construction of the facility, the certificate holder shall submit to the Climate Trust a bond or letter of credit in the amount of the offset funds of the monetary path payment requirement as determined under Condition S.2.

(a) The certificate holder shall use a form of bond or letter of credit that is substantially in the form of Attachment B to the MOU described in Condition S.5. At the request of the certificate holder, the Council may approve a different form of a bond or letter of credit without an amendment of the site certificate.

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

(c) The certificate holder shall maintain the bond or letter of credit in effect until the certificate holder has disbursed the full amount of the offset funds to The Climate Trust. The certificate holder may reduce the amount of the bond or letter of credit commensurate with payments it makes to The Climate Trust. The bond or letter of credit must not be subject to revocation before disbursement of the full amount of the offset funds.

**Condition S.7:** The certificate holder shall disburse to The Climate Trust offset funds and selection and contracting funds when requested by The Climate Trust in accordance with Conditions S.9 and S.10 and the following requirements:

(a) The certificate holder shall disburse selection and contracting funds to The Climate Trust before beginning construction and as appropriate when additional offset funds are required under Conditions S.9 and S.10

(b) Upon notice pursuant to subsection (c), The Climate Trust may request from the issuer of the bond or letter of credit the full amount of all offset funds available or it may request partial payment of offset funds at its sole discretion. Notwithstanding the specific amount of any contract to implement an offset project, The Climate Trust may request up to the full amount of offset funds the certificate holder is required to provide to meet the monetary path payment requirement.

(c) The Climate Trust may request disbursement of offset funds pursuant to paragraph (b) by providing notice to the issuer of the bond or letter of credit that The Climate Trust has executed a bond or letter of intent to acquire an offset project. The certificate holder shall require that the issuer of the bond or letter of credit disburse offset funds to The Climate Trust within three business days of a request by The Climate Trust for the offset funds in accordance with the terms of the bond or letter of credit.

**Condition S.8:** Except as provided in Condition S.9, within the first 12 months of commercial operation of the facility, the certificate holder shall conduct a 100-hour test (Year One Test). Tests performed for purposes of the certificate holder's commercial acceptance of the facility may suffice to satisfy this condition in lieu of testing after beginning commercial operation.

(a) The certificate holder shall conduct the Year One Test to determine the actual heat rate (Year One Heat Rate) and the net electric power output (Year One Capacity) on a new and clean basis, without degradation, for each generating unit, with the results adjusted for the average annual site condition for temperature, barometric pressure,

relative humidity, and operating hours per year. The certificate holder shall use a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel.

(b) The certificate holder shall notify the department at least 60 days before conducting the tests required in subsection (a) unless the certificate holder and the department have mutually agreed that less notice will suffice.

(c) Before conducting the tests required in subsection (a), the certificate holder shall, in a timely manner, provide to the department for its approval a copy of the protocol for conducting the tests. The department may approve modified parameters for testing on a new and clean basis pursuant to OAR 345-024-0590(1) without a site certificate amendment. The certificate holder shall not conduct the tests required in subsections (a) until the department has approved the testing protocols.

(d) Within 60 days after completing the Year One Tests, the certificate holder shall provide to the Council reports of the results of the Year One Tests.

**Condition S.9:** If the certificate holder has elected to calculate excess carbon dioxide emissions based on direct measurements then the Year One Test described in Condition S.8 is not required.

(a) If the Year One Test is not performed, the certificate holder must report carbon dioxide emissions using actual measured emissions as reported to the Department of Environmental Quality or the U.S. Environmental Protection Agency for all subsequent five year periods over the life of the facility and may not change its election to report based on new and clean heat rate in any subsequent five year period.

(b) If the Year One Test is not performed pursuant to Condition S.8, then the certificate holder shall report the facility's net kWh generation and actual measured carbon dioxide emissions for the 12 month period following start of commercial operation. The certificate holder shall report the net kWh generation and actual carbon dioxide emissions for this period to the department within two months of the end of the first 12 month period. The certificate holder shall use the net kWh generation and measured carbon dioxide emissions to perform the calculations to determine if a supplemental monetary path payment is needed as set forth in Condition S.10. The certificate holder shall submit these calculations to the department for verification.

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

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

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

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

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

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

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

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

(1) In determining the excess carbon dioxide emissions that the certificate holder must offset for a five-year period, the department shall apply OAR 345-024-0600(4)(a), unless the certificate holder has elected under OAR 345-024-0590(5) to utilize actual or measured carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide reporting requirement. The certificate holder shall pay for the excess emissions at \$1.27 per ton of carbon dioxide emissions (in 2015 dollars). The

department shall notify the certificate holder and The Climate Trust of the amount of the payment required, using the monetary path, to offset excess emissions.

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

**Condition S.12:** After the certificate holder has complied with the conditions relating to the carbon dioxide standard before beginning construction, incremental increases in capacity and heat rate that otherwise fall within the limits specified in OAR 345-027-0050(2) do not require an amendment of the site certificate if the certificate holder complies substantially with Conditions S.1 through S.11, except as modified below, and if:

- (a) The department or the Council determines, as described in OAR 345-027-0050(5), that the proposed change in the facility does not otherwise require an amendment; and
- (b) The certificate holder complies with the appropriate carbon dioxide emissions standard and monetary offset rate in effect at the time the department or the Council makes its determination under this condition.



Appendix B  
Perennial Wind Chaser Station  
Revegetation and Noxious  
Weed Control Plan

**Perennial Wind Chaser Station**  
**Revegetation and Noxious Weed Control Plan**

**October 2014**

**Prepared for:**  
**Perennial-WindChaser LLC**

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New York, NY 10017

**Prepared by:**  
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# 1 INTRODUCTION

This Revegetation and Noxious Weed Control Plan outlines the goals, methods, and standards for soil restoration and revegetation of areas expected to be temporarily disturbed during the construction, operation, and maintenance of the Perennial Wind Chaser Station project (Project).<sup>1</sup> In addition, this plan describes noxious and invasive weed control measures that will be implemented in all areas of the Project during and after construction, including both temporary disturbance areas and permanent aboveground facilities. Perennial-WindChaser LLC (Perennial) is not required to revegetate areas with permanent Project facilities, such as the power generating facility (Station) site, step-up substation, or any other permanent aboveground Project components; however, noxious weed control and erosion control will be implemented in all areas of the Project including within the transmission pipeline and natural gas pipeline rights-of-way ([ROW] Project area). The purpose of these efforts is to restore the soil and vegetation in temporarily disturbed Project areas to pre-disturbance condition or better.

The goal of this plan is to provide the methods and standards to:

1. Avoid or minimize impacts on the native habitats and vegetation communities present in the Project area;
2. Avoid or minimize impacts on native soils through erosion and loss or degradation of topsoil;
3. Avoid or control the introduction or spread of noxious weeds in or immediately adjacent to the Project area (including along Project access roads);
4. Re-establish native plant communities in non-agricultural areas of the Project within five years of completion of the construction of the Project; and
5. Re-establish the conditions for pre-Project farming practices in agricultural areas of the Project within one year of completion of the construction of the Project.

This plan has been developed in consultation with the Oregon Department of Fish and Wildlife (ODFW) and the Umatilla County Weed Control Board. Additionally, this plan utilizes restoration and revegetation methods and standards developed by other energy projects in this region of Oregon that have been approved by the Oregon Energy Facility Siting Council (EFSC 2006, 2011). All seed mixes, planting methods, noxious weed control treatments, topsoil conservation methods, and erosion control measures will only be

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<sup>1</sup> This plan is incorporated by reference in the Project's site certificate application and is not intended to be a "stand-alone" document. This plan does not contain all mitigation measures required of Perennial.

implemented with the approval of the ODFW and the individual landowners. Perennial will implement and maintain sediment and erosion control measures during construction and after construction until the risk of erosion has been eliminated and areas of disturbance are successfully restored. This plan also provides a brief summary of post-construction monitoring procedures to evaluate the success of the measures described in this plan. For a complete discussion of Perennial's monitoring procedures, refer to the Project Restoration Monitoring Plan (Exhibit P, Appendix P-3).

The Project area is composed primarily of active agriculture cropland, disturbed or weedy agricultural areas, and limited areas of shrub-steppe rangelands of varying quality (>2 percent in the natural gas pipeline ROW). Direct and indirect impacts on vegetation and wildlife habitat at aboveground facilities will be permanent in nature and will result from the removal of vegetation and wildlife habitat through excavation and grading activities. Other than noxious weed control measures and erosion and sediment control measures, revegetation will not be conducted at these sites.

In general, the intensity of construction impacts on vegetation and habitat in temporary disturbance areas will be low and will often be limited to the flattening of vegetation by rubber-tired vehicles. In some instances, the intensity of impacts in temporary disturbance areas will be higher and will require the removal of topsoil and vegetation through grading, excavation, or drilling activities. Perennial will implement revegetation measures in all temporary construction disturbance areas where soil is disturbed. Such soil disturbance sites will require active measures to restore vegetation cover in a timely manner, control erosion, and prevent the establishment and spread of noxious weeds. Construction crews will segregate topsoil from subsoil for pipeline trenching in agricultural areas and replace this topsoil during the restoration phase of the Project.

Perennial will implement a number of best management practices designed to control sediment and minimize erosion, particularly in the vicinity of Project drainages and waterbodies. These erosion and sediment control practices will be maintained for the duration of the construction restoration phases of the Project, but may be maintained longer if a high risk of erosion still exists. Erosion and sediment control measures are described in the Erosion and Sediment Control Plan, located in Exhibit I, Appendix I-2.

## **2 SITE DESCRIPTION**

The Station will be located on private land in Umatilla County, Oregon, approximately 4 miles southwest of the city of Hermiston, Oregon, near the intersection of Interstate Highways 82 and 84. In addition to the Station, the Project includes a 50-foot-wide natural gas pipeline ROW that will extend 4.63 miles south of the Station to the existing Gas Transmission Northwest pipeline and the construction of a new metering facility adjacent to the existing

metering facility. The natural gas pipeline ROW will be located almost entirely within the existing ROW of the lateral that services the Hermiston Generating Plant. In addition, the Project includes reconductoring an existing 12-mile transmission line that will terminate at a new 3-acre step-up substation, as well installing an approximately 477-foot-long underground transmission cable into the existing Bonneville Power Administration McNary Substation. The transmission line reconductoring will not result in permanent ground disturbance.

Permanent ground disturbance will primarily occur at 1) the Station site, 2) the step-up substation, 3) the natural gas pipeline metering facility, and 4) the fenced riser area.

Approximately 23.48 acres of category 5 and 6 habitat (developed areas and weedy grasslands at the Station site and the step-up substation) will be permanently removed as a result of the Project. These areas will not be revegetated after construction, although appropriate noxious weed control measures will be implemented in areas that have non-impervious surfaces.

Temporary ground disturbance will primarily occur at 1) the 50-foot-wide natural gas pipeline ROW, 2) the two new transmission line poles, 3) the underground electrical ROW connecting the step-up substation to the McNary Substation, and 4) the contractor's construction yard facilities adjacent to the Station. Approximately 2.03 acres of category 3 habitat (rabbitbrush-dominated shrub-steppe) and 34.64 acres of category 5 and 6 habitats (including weedy grassland, irrigated agriculture, and developed areas) will be temporarily disturbed. All temporarily disturbed Project areas will be seeded per ODFW requirements or returned back to agricultural use (at landowner request) after construction is complete.

**Table 1 Permanent and Temporary Disturbances (in acres) to Each Habitat Type and Habitat Mitigation Category**

Habitat Type	Mitigation Category	Disturbance Acres
<b>Permanent Disturbances</b>		
Weedy Grassland #1	5	0.00
Weedy Grassland #2	5	0.00
Weedy Grassland #3	6	0.00
Weedy Grassland #4	5	18.52
Weedy Grassland #5	5	0.51
Weedy Grassland #6	6	3.00
Agriculture	6	0.00
Shrub Steppe	3	0.00
Riparian	2	0.00
Open Water	6	0.29
Developed	6	1.16

**Table 1 Permanent and Temporary Disturbances (in acres) to Each Habitat Type and Habitat Mitigation Category**

Habitat Type	Mitigation Category	Disturbance Acres
<b>Permanent Disturbances</b>		
	<b>Total</b>	<b>23.48</b>
<b>Temporary Disturbances</b>		
Habitat Type	Mitigation Category	Disturbance Acres
Weedy Grassland #1	5	9.71
Weedy Grassland #2	5	0.59
Weedy Grassland #3	6	0.68
Weedy Grassland #4	5	10.10
Weedy Grassland #5	5	0.57
Weedy Grassland #6	6	0.71
Agriculture	6	6.77
Shrub Steppe	3	2.03
Riparian	2	0.00
Open Water	6	0.12
Developed	6	5.38
	<b>Total</b>	<b>36.67</b>

\*Acreage is subject to change as Project plans continue to be refined.

### 3 SCHEDULE

In general, implementation of the measures described in this plan will begin at the start of construction activities, although it may be appropriate to implement some measures prior to the commencement of ground-disturbing activities. In particular, it may be advantageous to pre-treat selected noxious weed populations before construction activities start if treatment will prevent plants from going to seed. Erosion control and noxious weed control measures should be implemented and maintained throughout the construction phase of the Project. Restoration and revegetation of temporary disturbance areas should occur as soon as possible after construction has been completed in any given area of the Project. In instances where this is not possible due to construction requirements, temporary erosion control measures (e.g., temporary slope breakers, erosion control fabric, planting of winter wheat, etc.) should be implemented instead until final restoration efforts can be started. After construction of the Project, erosion control, noxious weed control, and replanting and seeding will continue for up to five years or until Perennial, the ODFW, and the Oregon Department of Energy (ODOE) have deemed restoration and revegetation to be successful. If the Project has not

achieved successful restoration and revegetation after five years, Perennial will consult the ODFW and ODOE regarding additional measures or an alternative course forward. Refer to the Project Restoration Monitoring Plan (Exhibit P, Appendix P-3) for more details on post-construction monitoring procedures and schedule.

## **4 RESTORATION AND REVEGETATION METHODS**

Restoration and revegetation of temporarily disturbed Project areas will include: 1) erosion control and topsoil management, 2) noxious and invasive weed control, 3) seed mix selection and planting techniques, and 4) post-construction monitoring and contingency measures.

Monitoring of restoration efforts should be initiated during construction as work in individual areas of the Projects is completed, but most monitoring of revegetation will occur one to five years after construction has been completed.

Perennial anticipates following the restoration and re-seeding guidelines provided in this plan; however, the methods and timing could be altered at the request of landowners, the ODFW, and ODOE.

### **4.1 Erosion Control and Topsoil Management**

Soil preservation and preparation techniques, including erosion control and topsoil management measures, shall be implemented immediately prior to, or at the start of, construction. Erosion and sediment control measures are provided in more detail in the Project's Erosion and Sediment Control Plan (Exhibit I, Appendix I-2), and will include measures similar to those described below.

The Project shall implement the following erosion control and topsoil management measures:

- Minimize construction impacts in the Project area by, where practical and safe, limiting grading and clearing to avoid impacts on native soils and vegetation;
- Use proper soil management techniques, including topsoil stripping, stockpiling, and reapplying to establish surface conditions that would enhance development of diverse, stable, and self-generating plant communities. Topsoil management will apply to the transmission pipeline ROW where excavation, grading, or other construction activities could result in mixing of soil layers;
- Establish stable surface and drainage conditions and use standard erosion control devices and techniques to minimize soil erosion and sedimentation, including the installation of silt fencing, straw bales, mulch, straw wattle, erosion control fabric, slope breakers, and trench breakers, as appropriate;



- Establish terrain compatible with the surrounding landscape (recontouring) that emphasizes restoration of existing drainage and landform patterns, to the extent practical; and
- Weed control methods, including treatment approach and use of specific herbicides, shall be finalized prior to construction in coordination with individual landowners, the ODFW, and Umatilla County.

## **4.2 Noxious and Invasive Weed Control**

Noxious and invasive weed control should begin prior to ground disturbance through pre-treatment, if appropriate, and should continue through construction and during the operation and maintenance phases of the Project. Perennial shall implement measures to prevent or control introduction or spread of weed seeds and plant parts during construction or operations and maintenance phases of the Project. Efforts should focus on species that are designated as noxious weeds by the Oregon Department of Agriculture (ODA 2013) and by Umatilla County (Umatilla County Noxious Weed Control 2012). Table 2 shows the noxious and invasive weed species that were identified on the ROW during 2013 field surveys. In addition, Perennial shall attempt to prevent the introduction and spread of other invasive species not officially designated as noxious that could affect revegetation success, such as cheatgrass, Russian thistle, and tumble mustard.

The Project shall implement the following noxious and invasive weed control measures:

- Prevent introduction or spread of seeds and plant parts during construction or operations and maintenance from species that are designated as noxious weeds by the Oregon Department of Agriculture (ODA), and attempt to prevent the introduction and spread of other invasive species not officially designated as noxious, such as cheatgrass and Russian thistle;
- Include a discussion of the risks of noxious weeds and the Project control methods in the Project's environmental awareness training that Project personnel will undergo prior to entering the ROW;
- Qualified biological monitors or contract weed control personnel approved by the ODA, ODOE, and Umatilla County, as appropriate, shall conduct onsite biological monitoring in areas of noxious weed concern or presence before and after construction;
- Pre-treat all state-designated noxious weed populations identified in Project disturbance areas prior to construction, as practical;

- Wash all Project vehicles and equipment before they enter the Project Site for first time. Typically, this is done by constructing a contained wash structure at the contractor's construction yard and washing vehicles immediately upon arrival at the Project;
- Use regular site assessments and suitable herbicide application to keep off-ROW areas related to the Project, such as contractor construction yards, in weed free condition;
- Use certified weed-free straw bales and straw mulch for soil erosion and sedimentation control measures;
- Use certified weed-free seed during re-vegetation efforts obtained from a supplier approved by the State of Oregon; and
- Use manual, mechanical (mowing, clipping), or chemical (herbicides) techniques to control weed populations. Perennial may utilize any of these methods on a site-specific basis. If herbicide applications are used to treat weed populations, a licensed contractor should be used to prescribe specific treatments and to apply chemicals.

**Table 2 Designated Noxious Weeds and Other Invasive Species Observed During 2013 Field Surveys**

Latin Name	Common Name	ODA Classification <sup>1</sup>	Umatilla County Classification <sup>2</sup>	Number of Sites
<b>State-designated noxious weeds</b>				
<i>Agropyronrepens</i>	Quackgrass	None <sup>3</sup>	B	4
<i>Centaureadiffusa</i>	Diffuse knapweed	B	B <sup>4</sup>	6
<i>Kochiascoparia</i>	Kochia	B	B	3
<i>Onopordumacanthium</i>	Scotch thistle	B	B <sup>4</sup>	9
<i>Secale cereal</i>	Cereal rye	None	B	7
<i>Tribulusterrestris</i>	Puncturevine	B	B	1

**Table 2 Designated Noxious Weeds and Other Invasive Species Observed During 2013 Field Surveys**

Latin Name	Common Name	ODA Classification <sup>1</sup>	Umatilla County Classification <sup>2</sup>	Number of Sites
<b>Invasive Species Not Designated as Noxious</b>				
<i>Bromustectorum</i>	Cheatgrass	none	none	throughout
<i>Salsola tragus</i>	Russian thistle	none	none	throughout
<i>Sisymbriumaltissimum</i>	Tumble mustard	none	none	throughout

Source: ODA 2013, Umatilla County Noxious Weed Control 2012

Notes:

<sup>1</sup>ODA Class B definition: a weed of known economic importance which occurs in the state in small enough infestations to make eradication or containment possible; or is not known to occur, but its presence in neighboring states makes future occurrence in Oregon seem imminent. Limited to intensive control at the state, county or regional level as determined on a site specific, case-by-case basis. Where implementation of a fully integrated statewide management plan is not feasible, biological control (when available) shall be the primary control method.

<sup>2</sup>Umatilla County Class B definition: a weed of known economic importance which is regionally abundant, but which may have limited distribution in some countries. Where implementation of a fully integrated statewide management plan is feasible, biological control shall be the main control approach for species for which biological agents are available. Limited to intensive control at state or county level as determined on a case-by-case basis.

<sup>3</sup>This species was included on the ODA's 2010 designated noxious weed list.

<sup>4</sup>This species has been targeted by Umatilla County for additional enforcement throughout the county in dryland annual cropping areas, irrigated crops and pastures, and dryland/range/timber.

### 4.3 Re-seeding Methods

Areas of temporary disturbance will be restored to original grade and soil condition as soon as possible after the final construction ground disturbance and will generally be re-contoured and de-compacted, if necessary. These areas will then be evaluated to determine whether re-seeding or other revegetation techniques are required to return the area to preconstruction vegetation conditions. Re-seeding may not be necessary or appropriate in some areas, including places where vegetation has been flattened but not crushed and those where little or no vegetation was present prior to construction. If appropriate, re-seeding will be initiated immediately after construction in any completed part of the Project. Re-seeding activities may need to be delayed, depending on the season or on weather conditions, but should always occur as soon as appropriate after construction. Preliminary seed mixes are provided in Table 3; however, the final seed mixes used may change as a result of further consultations with the ODA and ODFW or at the request of individual landowners.

### Agricultural Croplands

Perennial shall coordinate with landowners and, as necessary, restore croplands to original grade and contour and repair any agricultural drainage systems that are impacted by construction. Individual landowners will be consulted when determining the proper seed mix to be used during re-seeding activities on agricultural lands. The primary goal of cropland revegetation is to return croplands to a condition consistent with typical pre-construction conditions. If necessary, in coordination with the landowner, an appropriate cover crop will be planted to hold the site until the next crop planting rotation. Cultivated agricultural areas are successfully revegetated if the replanted areas achieve crop production comparable to adjacent non-disturbed cultivated areas. Perennial shall consult with the landowner to determine whether these areas have been successfully revegetated and shall report to the ODFW and ODOE on the success of revegetation in these areas as part of its annual Restoration Monitoring Report (see Restoration Monitoring Plan, Appendix P-3).

### Disturbed Grasslands and Shrub-Steppe Rangeland

Weedy, disturbed grasslands constitute the primary non-agricultural vegetation type in the Project area (approximately 61 percent of temporary disturbance areas). Shrub-steppe rangeland constitutes a very small portion of the non-agricultural vegetation type in the Project area (less than 6 percent of temporary disturbance areas). Seed mixtures for disturbed grasslands and shrub-steppe rangeland (Table 3: Seed Mixes 2 and 3, respectively) have been developed consisting of native species and desirable non-native species known to provide erosion control and wildlife forage benefits in Eastern Oregon. The current seed mix recommendations provided in Table 3 may be altered prior to construction and revegetation efforts in consultation with landowners and the ODFW.

Perennial shall use the following guidelines during re-seeding efforts:

- Re-seed disturbed areas as soon as possible after final construction disturbance in each area.
- Re-seed construction soil disturbance areas to restore vegetation as soon as possible after construction in any part of the Project where construction has been completed.
- Re-seed temporary disturbance areas during the appropriate season and as weather conditions allow.
- Crews will attempt to conduct all re-seeding during the period from February through early April for construction disturbances that occurred during the winter and early spring. For areas where construction is completed outside of the winter or spring periods, re-seeding maybe delayed until the months of October or November (when dry season has passed). If final construction and soil restoration are not completed at a

time that allows immediate re-seeding during one of the two periods listed above (winter/spring or fall), the areas will be mulched or otherwise treated to minimize erosion until seeding can be conducted.

- Seeds will be applied using either manual or mechanical methods, depending on factors such as the size of the area to be re-seeded and risk for further disturbance due to the use of planting equipment (e.g., tractor or all-terrain vehicle).
- In addition, Perennial may employ either broadcasting or drilling techniques as appropriate and feasible. Broadcasting or seed drilling methods will be used according to which method is most appropriate for the disturbance area.
- Straw mulch may be applied as needed immediately after seeding.

**Table 3 Seed Mix for Temporarily Disturbed Project Areas**

<b>Vegetation Type</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>PLS (pounds per acre<sup>1,2</sup>)</b>	<b>Description/ Purpose</b>
Seed Mix 1: Agricultural (irrigated, dryland, and pastures)	Wheat or other crop seed, at the request of landowner.		At landowner request	(EC)
Seed Mix 2: Disturbed native grasslands	Secarbluebunch wheatgrass	<i>Pseudoregneriaspicata</i>	6	(N) (EC) (F)
	Sherman big bluegrass	<i>Poaampla</i>	1.5	(N) (F)
	Sandberg's bluegrass	<i>Poasecunda</i>	2.0	(N) (F)
	Small burnet	<i>Sanguisorba minor</i>	2.0	(I) (F)
	Great Basin wildrye *	<i>Elymuscinereus</i>	1.0	(N) (EC) (F)
	Needle and thread grass*	<i>Hesperostipacomata</i>	1.0	(N) (EC) (F)
	Western yarrow *	<i>Achilleamillefolium var. occidentalis</i>	1.0	(N) (F)
Seed Mix 3: Shrub-steppe	Secarbluebunch wheatgrass	<i>Pseudoregneriaspicata</i>	6	(N) (EC) (F)
	Sherman big bluegrass	<i>Poaampla</i>	1.5	(N) (F)
	Sandberg's bluegrass	<i>Poasecunda</i>	2.0	(N) (F)

**Table 3 Seed Mix for Temporarily Disturbed Project Areas**

<b>Vegetation Type</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>PLS (pounds per acre<sup>1, 2</sup>)</b>	<b>Description/ Purpose</b>
	Ladak alfalfa	<i>Medicago sativa</i>	1.0	(I) (F)
	Small burnet	<i>Sanguisorba minor</i>	2.0	(I) (F)
	Great Basin wildrye *	<i>Elymuscinereus</i>	1.0	(N) (EC) (F)
	Needle and thread grass*	<i>Hesperostipacomata</i>	1.0	(N) (EC) (F)
	Western yarrow *	<i>Achilleamillefolium var. occidentalis</i>	1.0	(N) (F)
	Big sagebrush *	<i>Artemisia tridentata</i>	1.0	(N) (F)

Key:

(N) = Native, (I) = Introduced, (EC) = Erosion Control, (F) = Forage

\* Optional species depending on site and availability

<sup>1</sup> PLS = pure live seed

<sup>2</sup> Final pounds/acre may change at the request of the landowners or the ODFW

## 5 MONITORING PROGRAM

The Restoration Monitoring Plan (Exhibit P, Appendix P-3) outlines the goals, methods, and criteria to be used by Perennial to evaluate and track the success of restoration efforts during and after construction of the Project. The discussion below provides a brief summary of the monitoring procedures provided in Appendix P-3; however, Appendix P-3 is the primary document for all monitoring procedures.

Perennial will conduct annual monitoring of restoration efforts in all Project areas. The purpose of monitoring is to evaluate the effectiveness of long-term soil stability, noxious weed control, and vegetation condition within areas disturbed during construction and to identify appropriate remedial actions that will help Perennial attain successful restoration of disturbed areas.

Perennial will provide biologists and/or inspectors qualified to conduct these evaluations. Restored cultivated lands will be monitored primarily by the landowner and/or farmer for production ability after Perennial has completed final construction restoration. Landowners may report any subsequent concerns to Perennial. In many cases, the restored croplands will be replanted during the next growing season. Perennial's monitoring teams will provide general descriptions of the conditions of cultivated agricultural areas during monitoring efforts; however, these will mainly be used to verify information provided by the landowner

and/or farmer. Therefore, most monitoring effort will occur at non-cultivated areas. However, Perennial's monitors will note substantial restoration issues observed on cultivated lands during the course of monitoring in other Project areas. Although monitoring of some restoration measures will be applicable to all project areas (e.g., erosion control and noxious weed control), monitoring of other measures will only apply to areas that are not developed or used for agricultural farming (e.g., topsoil segregation, re-seeding). Where possible, all annual monitoring efforts will be conducted in single site visits and by the same team.

Restoration monitoring will begin in the first growing season (fall or spring) following the completion of construction and initial restoration and continue annually for up to five years. When it is determined that an area of the Project has been successfully restored at any point during years 1 to 5, by satisfying all success criteria, Perennial will request concurrence from ODOE and ODFW. If ODOE and ODFW concur, Perennial will conclude that it has no further obligation to perform revegetation activities in that area of the Project. Where this is the case, the monitoring effort may require fewer than five years. If after five years of monitoring (and remedial actions) some sites have not attained restoration success, Perennial will coordinate with ODOE and ODFW regarding appropriate steps forward. At this point Perennial may suggest additional restoration techniques or strategies be implemented, or Perennial may request a waiver from further restoration obligations at these sites.

For a complete discussion of Perennial's monitoring procedures, refer to the Project Restoration Monitoring Plan (Appendix P-3).

## **6 AMENDMENT OF PLAN**

This Revegetation Plan may be amended by agreement of Perennial and the ODOE. Amendments will be prepared in consultation with the ODFW and ODOE and may be made without altering the site certificate.

## 7 REFERENCES

- EFSC (Energy Facility Siting Council). 2011. Summit Ridge Wind Farm: Revegetation and Weed Control Plan. January 14, 2011. Available at:  
[http://www.oregon.gov/energy/Siting/docs/SRW/SRW\\_final\\_order\\_exhibits\\_081911.pdf](http://www.oregon.gov/energy/Siting/docs/SRW/SRW_final_order_exhibits_081911.pdf).
- \_\_\_\_\_. 2006. Klondike III Wind Project: Revegetation Plan. June 30, 2006. Available at:  
<http://www.oregon.gov/energy/Siting/docs/KWP/KWPOB.pdf>.
- ODA (Oregon Department of Agriculture). 2013. Noxious Weed Policy and Classification System 2013. Oregon Department of Agriculture Noxious Weed Control Program. Salem, Oregon, 2013.
- Umatilla County Noxious Weed Control. 2012. Umatilla County 2011 Noxious Weed List. Pendleton, Oregon.



Appendix C  
Perennial Wind Chaser Station  
Restoration Monitoring Plan

# **Perennial Wind Chaser Station**

## **Restoration Monitoring Plan**

**October 2014**

### **Prepared for:**

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## **1 INTRODUCTION**

This Restoration Monitoring Plan outlines the goals, methods, and criteria to be used by Perennial-WindChaser LLC (Perennial) to evaluate and track the success of restoration efforts during and after construction of the Perennial Wind Chaser Station project (Project). These efforts include measures to help ensure proper topsoil management, soil stabilization, and erosion control; noxious weed control; and site revegetation. This plan focuses primarily on post-construction monitoring procedures; however, some measures implemented during earlier phases of construction, such as pre-treatment of noxious weeds and temporary erosion control techniques, may require monitoring during the construction phase.

The goals of the Project restoration measures and monitoring procedures are to:

1. Avoid or minimize impacts on native soils and habitats caused by erosion and loss or degradation of topsoil;
2. Avoid or control the introduction or spread of noxious weeds in or immediately adjacent to the Project area (including along Project access roads);
3. Re-establish native plant communities in non-cultivated temporary disturbance areas within five years of completion of the construction of the Project; and
4. Re-establish the conditions for pre-Project farming practices in cultivated agricultural areas of the Project within one year of completion of the construction of the Project;

This plan provides summaries only of the restoration measures that will be implemented during and after construction of the Project. These measures are discussed in more detail in the Project Erosion and Sediment Control Plan (Exhibit I, Appendix I-2) and in the Project Revegetation and Noxious Weed Control Plan (Exhibit P, Appendix P-2). Although these other plans also discuss monitoring procedures, this plan is the primary document for Project monitoring procedures. The monitoring procedures described in this plan supersede any monitoring procedures discussed in those plans.

The procedures described in this plan have been reviewed and approved by the Oregon Department of Energy (ODOE), the Oregon Department of Fish and Wildlife (ODFW), and the Umatilla County Weed Control Board. The procedures described in this plan utilize some of the restoration and revegetation methods and standards approved by ODOE for other energy projects in this region of Oregon (ODOE 2006, 2011).

## **2 SITE DESCRIPTION AND NATURE OF IMPACTS**

The Project will be located on private lands in Umatilla County, Oregon. The project components relevant to this monitoring plan, including impacts types and acreages, are provided in Table 1 and described below.

Permanent ground disturbance related to construction will occur at 1) the Energy Facility Site (Station), 2) the step-up substation, and 3) and the riser structures at the Bonneville Power Administration's McNary Substation. At these sites, approximately 23.48 acres that consist of developed areas and weedy grasslands will be permanently altered. These areas will not be revegetated after construction, although appropriate soil stabilization, erosion control, and noxious weed control measures will be implemented in areas that have non-impervious surfaces.

Temporary ground disturbances related to construction will occur at all other Project sites, including 1) the natural gas pipeline right-of-way (ROW), 2) the construction laydown and parking area, 3) the underground electrical ROW connecting the step-up substation to the McNary Substation, 4) the contractor's construction yard facilities adjacent to the Station, and several other small project features. At these sites, an estimated 36.67 acres of land will be temporarily impacted as a result of the Project: approximately 22.5 acres composed of weedy grasslands; 12.2 acres of developed or agricultural lands; and 2 acres of shrub-steppe habitat.

Often, the intensity of construction impacts on vegetation and habitat in temporary disturbance areas will be low and will often be limited to the flattening of vegetation by rubber-tired vehicles. In some instances, the intensity of impacts in temporary disturbance areas will be higher and will require the removal of topsoil and vegetation through grading, excavation, or drilling activities.

**Table 1 Project Disturbance Areas**

Project Feature	Notes	Acres Impacted	
		Temporary	Permanent
<b><i>Permanent disturbance areas</i></b>			
Station site	Power station and switchyard	--	19.97
Step-up Substation	Step-up voltage to the BPA's McNary Substation	--	3.0
Risers structure	within McNary Substation/USACE lands	--	0.51
<b><i>Temporary disturbance areas</i></b>			
Construction Laydown and Parking (located outside of Energy Facility Site boundary)	During construction	5.11	--
Natural Gas Pipeline	4.63 miles long, 50-foot-wide ROW	28.06	--
Initial tie-in Transmission Poles (two new towers)	2 towers, 0.23 acres each	0.46	--
Underground 500-kV Transmission Cable	Step-up substation to risers	0.55	--
Underground Process Water Line	208 feet by 50 feet	0.24	--
Underground Reclaimed Water Line	538 feet by 50 feet	0.62	--

**Table 1 Project Disturbance Areas**

Project Feature	Notes	Acres Impacted	
		Temporary	Permanent
T-Line Tie-in to Substation	100 x 11 feet	0.03	--
Step-up Substation Road Upgrade	Gravel on existing access road (12 feet by 800 feet long)	0.22	--
Transmission Line Reconductoring <sup>1</sup>	12 stringing sites (50 feet by 100 feet)	1.38 <sup>1</sup>	--
<b>Subtotal</b>		36.67	23.48
<b>TOTAL</b>		<b>60.15</b>	

**Notes:**

<sup>1</sup> Locations of up to 12 stringing sites (50 X 100 feet each) associated with the transmission line reconductoring have not been determined. No excavating, grading, or other soil disturbance will occur at these sites; potential disturbances will primarily result from vehicles driving on grass, shrubs, and other vegetation.

**Key:**

BPA Bonneville Power Administration  
 kV kilovolt  
 ROW right-of-way  
 USACE United States Army Corps of Engineers

### 3 SUMMARY OF RESTORATION MEASURES

Successful restoration of Project disturbance areas will be accomplished by implementing measures during construction that are designed to help ensure success in three main areas:

- Erosion control, topsoil management, and soil stabilization;
- Noxious weed control; and
- Revegetation.

Soil stabilization, erosion control, and noxious weed control measures will generally be implemented in all Project areas, including both temporary disturbance areas and permanent aboveground facilities. However, topsoil management and revegetation measures will generally only be implemented in temporary disturbance areas, including the pipeline ROW and contractor yards and parking areas. The Project is not required to restore vegetation or original soil conditions in areas with permanent aboveground Project facilities, such as the power generating facility (Station) site and the step-up substation. For cultivated agricultural lands, the Project will determine appropriate revegetation, soil stabilization, and topsoil restoration methods in coordination with the individual landowner and/or farmer.

The sections below summarize the restoration measures that will be implemented during construction of the Project that may be relevant to monitoring procedures. These measures are discussed in more detail in the Project Erosion and Sediment Control Plan, located in Exhibit I, Appendix I-2 and in the Project Revegetation and Noxious Weed Control Plan in Exhibit P,

Appendix P-2. The sections below are intended for use as a reference by field monitoring personnel after the measures have already been implemented.

### **3.1 Erosion Control, Topsoil Management, and Soil Stabilization Measures**

The goal of these soil preservation measures is to avoid or minimize construction-related impacts on native soils and on the environment that may result from erosion or mixing of topsoil with subsoil layers. Perennial will implement erosion control, topsoil management, and soil stabilization measures according to the following general guidelines:

- Erosion control measures will be implemented immediately prior to ground disturbances in Project areas. These measures will be maintained for the duration of the construction and restoration phases, as necessary, and may be maintained into the operations and maintenance phase until the risk of erosion has been eliminated and areas of disturbance are successfully restored.
- Standard erosion control techniques will be used, including the use of silt fencing, straw bales, mulch, straw wattle, erosion control fabric, water bars, temporary and permanent slope breakers, trench breakers, and other techniques, as appropriate.
- At the discretion of Perennial's environmental inspectors and the pertinent landowners, some permanent erosion control measures may be appropriate (e.g., permanent slope breakers).
- Topsoil management techniques will be implemented at the start of ground-disturbing activities and maintained throughout construction, as needed.
- At a minimum, trench line and spoils side topsoil stripping and segregation will be performed in temporary disturbance areas, unless the pertinent landowner and/or farmer has requested otherwise.
- At the discretion of Perennial's environmental inspectors and the pertinent landowner and/or farmer, the contractor may conduct topsoil segregation in other Project areas where topsoil and subsoil might mix, such as the pipeline ROW during muddy conditions, or other areas where excavation or grading are needed.
- Soil stabilization measures will be implemented as soon as construction in any Project area is complete and, if needed, again during the final restoration and clean-up phase. These measures typically include restoring the site to original grade and contour and compacting soils as necessary.

### **3.2 Noxious and Invasive Weed Control Measures**

Perennial will implement measures to prevent or control introduction or spread of designated noxious weed seeds and plant parts prior to and during construction and during the operations and maintenance phases of the Project. Noxious weed control efforts will focus on species that are designated as noxious weeds by the Oregon Department of Agriculture (ODA 2013) and by



Umatilla County (Umatilla County Noxious Weed Control 2012). The goal of noxious weed control is to prevent the introduction or spread of noxious weeds in or immediately adjacent to the Project area, but not to eradicate all noxious weed populations in Project areas.

Six designated noxious weed species were observed during field surveys in 2013: quackgrass (*Agropyron repens*), diffuse knapweed (*Centaurea diffusa*), kochia (*Kochia scoparia*), Scotch thistle (*Onopordum acanthium*), cereal rye (*Secale cereal*), and puncturevine (*Tribulus terrestris*). Locations of noxious weed observations are shown in Table 3 and Figures 1a to 1e. These species are all classified as category B by the State of Oregon and/or Umatilla County, indicating that limited to intensive control is required, as determined on a site-specific, case-by-case basis. In addition, surveyors observed three species of common invasive species that are not designated as noxious: including cheatgrass (*Bromus tectorum*), Russian thistle (*Salsola tragus*), and tumble mustard (*Sisymbrium altissimum*). Perennial is not required to treat or control these additional species.

Perennial will implement noxious weed control measures according to the following general guidelines:

- Qualified biologists will conduct onsite noxious weed surveys and monitoring.
- Noxious weed control may utilize manual (hand pulling), mechanical (mowing, clipping), or chemical (herbicides) treatment techniques to control weed populations.
- Perennial may utilize any of these methods on a site-specific basis but shall obtain approval from the ODFW and individual landowners prior to using specific herbicides.
- Only a state-licensed weed control contractor will apply herbicide treatments.
- Assess Project sites regularly during construction and treat weed populations as needed.
- Use certified weed-free straw bales and straw mulch for soil erosion and sedimentation control measures, and revegetation efforts.
- Finalize weed control methods, including treatment approach and use of specific herbicides, prior to construction in coordination with individual landowners, the ODFW, and Umatilla County.

### **3.3 Revegetation Measures**

Perennial will re-seed all temporary disturbance areas where soil and vegetation have been disturbed, unless the individual landowners have requested otherwise. Re-seeding may not be necessary or appropriate in some areas, including sites where vegetation has been flattened but not crushed and areas where little or no vegetation was present prior to construction. In all cases, Perennial will seek approval from the pertinent land owner and/or farmer before re-seeding.

#### ***Agricultural Croplands***

Perennial will coordinate with landowners and/or farmers and, as necessary, restore croplands to original grade and contour and repair any agricultural drainage systems that are impacted by construction. Individual landowners and/or tenant farmers will be consulted when determining the proper seed mix (usually a single type of crop seed, such as winter wheat) to be used during re-seeding activities on agricultural lands. The goal of cropland revegetation is to return croplands to a condition and production ability consistent with typical pre-construction condition. Restoration on cultivated lands, including potential re-seeding, will be conducted as soon as possible after construction has been completed.

### ***Disturbed Grasslands and Shrub-Steppe Rangeland***

During the clean-up phase of the Project, all non-cultivated temporary disturbance areas will be restored to original grade and soil condition as soon as possible after the final construction activities. For the Project, this includes areas with six different types of weedy grasslands, and one shrub-steppe area dominated by sagebrush and weedy grasses. These areas will then be evaluated to determine whether re-seeding is required to return them to pre-construction vegetation conditions. If re-seeding is necessary, this will generally be initiated immediately after construction is completed in any part of the Project site. In some cases, final re-seeding may need to be delayed, depending on the season or on weather conditions, but it should always occur as soon as appropriate after construction. Temporary seeding may be appropriate in some cases if a long delay is expected between the end of construction at a site and final restoration.

The goal of grassland and shrub-steppe rangeland restoration and re-seeding is to return these areas to a vegetative cover and species assemblage that are consistent with (not identical to) typical pre-construction conditions, or better. Individual landowners will be contacted for approval before applying seed mixes to these areas. Restoration of non-cultivated areas will utilize seed mixes that incorporate both native and desirable non-native seed species. Preliminary seed mixes have been determined and are provided in Table 4; the final seed mixes used may change as a result of further consultations with the ODA and ODFW or at the request of individual landowners.

Perennial will implement revegetation measures according to the following general guidelines:

- Re-seed areas as soon as possible after final construction disturbance in each area.
- Re-seed during the appropriate season (usually winter/spring or fall) and as weather conditions allow.
- If final construction is not completed at a time that allows immediate re-seeding, the areas will be mulched or otherwise treated to minimize erosion until seeding can occur.
- All seed mixes, planting methods, noxious weed control treatments, topsoil conservation methods, and erosion control measures will only be implemented with the approval of the ODFW and the individual landowners and/or farmers.

## **4 MONITORING PROCEDURES**

Perennial will conduct annual monitoring of restoration efforts in all Project areas. Perennial will provide biologists and/or inspectors qualified to conduct these evaluations. Restored cultivated lands will be monitored primarily by the landowner and/or farmer for production ability after Perennial has completed final construction restoration. Landowners may report any subsequent concerns to Perennial. In many cases, the restored croplands will be replanted during the next growing season. Perennial's monitoring teams will provide general descriptions of the conditions of cultivated agricultural areas during monitoring efforts; however, these will mainly be used to verify information provided by the landowner and/or farmer. Therefore, the sections below primarily address monitoring at non-cultivated areas. However, Perennial's monitors will note substantial restoration issues observed on cultivated lands during the course of monitoring in other Project areas. Although monitoring of some measures will be applicable to all project areas (e.g., erosion control and noxious weed control), monitoring of other measures will only apply to areas that are not developed or used for agricultural farming (e.g., topsoil segregation, re-seeding). Where possible, all annual monitoring efforts will be conducted in single site visits and by the same team.

The purpose of monitoring is to evaluate the effectiveness of long-term soil stability, noxious weed control, and vegetation condition within areas disturbed during construction and to identify appropriate remedial actions that will help Perennial attain successful restoration of disturbed areas.

### **4.1 Erosion Control, Topsoil Management, and Soil Stabilization Monitoring Procedures**

Perennial will provide construction inspectors and/or environmental inspectors during all phases of construction to oversee and inspect the implementation and maintenance of erosion control, topsoil segregation, and soil stabilization measures. During the operations and maintenance phase of the Project, Perennial's biologists and/or inspectors will conduct annual monitoring to evaluate the success of these measures.

Monitoring for these soil preservation measures will be conducted in all Project areas, but will focus on:

- Areas particularly susceptible to erosion, such as those near Project drainages and waterbodies (see Table 2) and areas with slopes;
- Areas where topsoil segregation was conducted;
- The pipeline trench line (e.g., for subsidence); and
- Areas where temporary or permanent erosion control devices (techniques) are in place.

**Table 2 Project Waterbodies**

<b>Project ID</b>	<b>Type</b>	<b>Name</b>	<b>Location (milepost)</b>
SS-001-003	Canal/ditch	Westland A Canal	0.00
SS-001-002	Canal/ditch	Westland A Canal	1.29
SS-001-001	Canal/ditch	High Line Canal	2.03

Monitoring crews will describe the effectiveness of the measures and differentiate between normal levels of wear-and-tear (e.g., due to weather conditions) and implementation failures. Monitors should recommend remedial actions for Perennial to take when needed, such as maintaining or repairing previously implemented measures or implementing new measure, if appropriate. All reports and recommendations for maintenance or remedial action should be supported by detailed notes and photographic documentation, and be recorded using a global positioning system (GPS).

#### **4.2 Noxious and Invasive Weed Control Monitoring Procedures**

Prior to construction, Perennial's biologists will conduct surveys for designated noxious weeds. Perennial will provide construction inspectors and/or environmental inspectors during all phases of construction to oversee and inspect the implementation of noxious weed control measures and monitor weed populations as necessary. During the operations and maintenance phase of the Project, Perennial's biologists will conduct annual noxious weed monitoring.

Monitoring of noxious weed measures will be conducted in all areas disturbed by the Project, including both temporary and permanent disturbance areas, but will focus on:

- Areas where noxious weeds were identified during pre-construction surveys;
- Any sites used as noxious weed cleaning stations during construction; and
- High traffic areas, including areas used for parking and access during construction, the operations building site, ROW access points, and drive lanes during operations and maintenance.

Monitoring crews will describe the effectiveness of noxious weed control measures across the Project area and recommend remedial actions for Perennial to conduct as necessary. Crews will inspect noxious weed sites documented during pre-construction surveys to determine if they have reestablished and, if so, if they have spread. Locations of noxious weed observations are shown in Table 3 and Figure 1a through 1e.

All recommendations for remedial actions should be supported by detailed notes and photo-documentation and be recorded using GPS. The Project Biological Resources Survey Report (Exhibit P, Appendix P-1) provides more detail on the noxious weeds observed during surveys, including species, percent cover, and extent of population. The same types of data will be collected during monitoring efforts.

### **4.3 Revegetation Monitoring Procedures**

Perennial will provide qualified biologists to conduct annual monitoring of re-seeded areas. Biologists will select representative sites in Project revegetation areas for analysis and compare the results to the vegetation in nearby areas not disturbed by construction. Analysis at each site will be conducted at a vegetation monitoring plot within the Project boundary and a reference site outside of the Project boundary. Perennial does not have access to lands beyond its 50-foot-wide permanent ROW easement or other Project boundaries; therefore, it is not possible to conduct detailed surveys of reference plots in areas outside of the Project boundary. Instead, biologists will visually assess vegetation conditions at the reference sites in adjacent areas without leaving the Project boundary. In addition to providing detailed documentation of revegetation efforts at the vegetation monitoring plot and reference sites, the investigators will provide an overview summary of revegetation efforts across all temporary disturbance areas. This latter effort will not require sampling and will instead be based on visual inspection of the ROW conditions.

The purpose of revegetation monitoring is to help Perennial ensure that vegetative cover and species assemblage in temporary disturbance areas is restored to levels that are of similar quality or better than the conditions at reference sites. Because most of the temporary disturbance areas were already heavily disturbed and supported a large proportion of non-native plants prior to construction, achieving purely native plant assemblages is not the goal of this effort. Rather, the goal will be to achieve an acceptable level of ground cover of all plants, as well as an acceptable assemblage of desirable plant species (such as those included in the seed mix). Restoration success criteria are further described in Section 4.4.

#### ***Revegetation Monitoring Plots***

Vegetation monitoring plots will each be 10 feet in diameter and be located at representative areas in some of the larger temporary disturbance areas. Plots should be visited during the growing season. The types of data recorded for vegetation monitoring plots and reference sites will be identical and will include GPS documentation, photographic documentation, and analysis for vegetative cover and species composition. The same revegetation monitoring plots and reference sites will be analyzed from year to year, unless this is not appropriate due to fire damage, disturbance by the landowner, or other occurrence.

Locations of vegetation monitoring plots and nearby reference sites will be as follows:

- At least two plots (and reference sites) per mile will be established in the pipeline ROW (10 plots total);
- Two plots (and reference sites) will be established at the construction laydown and parking area;
- One plot (and reference site) will be established in the underground electrical ROW near the McNary Substation; and

- No plots will be placed in cultivated or developed lands, in Project permanent aboveground facilities, or in the remaining smaller temporary disturbance areas.

For the Project, temporary construction disturbance will occur in areas with the following habitat types: six different types of weedy grasslands and one shrub-steppe area dominated by sagebrush and weedy grasses. In addition, cultivated areas that were re-seeded will require at least a cursory inspection to verify information provided by the landowner and/or farmer. These areas are shown in Figures 2, 3a, and 3b and are discussed in more detail in the Project's 2013 Biological Survey Report (Exhibit P, Appendix P-1).

During revegetation monitoring, the investigator will collect the following information regarding conditions at the sites:

- Confirmation that all areas requiring revegetation have been seeded (part of the overview summary of restoration efforts for the entire ROW);
- Vegetation characteristics at revegetation monitoring plots and associated reference sites, including:
  - Plant species and percent cover of species (visual estimate)
  - Percentage of total vegetative cover (visual estimate)
  - Percentage of bare soil (visual estimate)
- Percent cover of native and introduced desirable plant species (included in seed mixes or by natural recruitment);
- Percent cover of noxious weed species (those listed as noxious under the ODA Noxious Weed Control Program, by Umatilla County, or other invasive species such as cheatgrass and Russian thistle), and density estimates by species if present;
- Presence of soil condition or erosion problems that are negatively influencing revegetation success and require remedial action; and
- For cultivated agricultural lands, the monitors will report crop presence or evidence of recent harvest.

#### **4.4 Restoration Success Criteria**

Erosion control, topsoil management, and soil stabilizing measures will be deemed successful if little to no loss of native soils is visible. If the levels of recent native soil loss appears to be similar that of nearby areas outside of the Project area, Perennial will consider this to be acceptable and meeting the criteria.

Noxious weed control measures will be deemed successful if the numbers, extents, and densities of noxious weed populations are similar to pre-construction conditions, and populations have not spread to areas outside of the Project boundary that were not previously infested.

Disturbed grasslands and shrub-steppe rangeland will be considered successfully restored if the habitat quality in these areas is similar to or better than that at the reference sites. Because most of these areas were already heavily disturbed and supported a large proportion of non-native plants (including high abundance of cheatgrass) prior to construction, it is not the goal of this effort to achieve the exact levels of ground cover and species assemblages that were present prior to disturbance. Rather, the goal will be to achieve habitat quality that is similar to, or better than, the habitat quality observed at the reference site.

Based on the revegetation criteria approved by ODOE and ODFW for recent energy projects in similar habitat (ODOE 2006, 2007), Perennial will use the following criteria to determine post-construction revegetation success:

- Perennial will aim for restored sites to be dominated by desirable species; and
- Perennial will aim to achieve at least a 30 percent total canopy cover for all species and a ground cover of at least 25 percent for desirable species, unless conditions at reference sites are lower than this. Vegetation percent cover goals may be adjusted to match the typical percent cover in surrounding undisturbed areas.

For the purposes of these revegetation efforts, “desirable species” indicates not only the native or beneficial non-native species included in the seed mix, but also those that may be recruited naturally. Reseeding or replanting efforts will occur, in consultation with the ODFW, in any area where monitoring identifies a restoration failure.

Actively cultivated agricultural croplands will be considered successfully restored if these areas achieve crop production comparable to adjacent agricultural areas that were not disturbed during construction. No annual plot surveys will be conducted on active agricultural croplands. Perennial shall coordinate with the landowners and/or farmers to determine when sites have been successfully restored.

#### **4.5 Remedial Action and Maintenance**

Following each of the annual monitoring surveys described above, Perennial will conduct remedial measures as needed to address remaining soil impacts and revegetation requirements not achieved through initial plantings.

Common remediation measures that monitoring crews may recommend include:

- Re-seed select areas where significant areas of bare soil remain after establishment of initial seeding;
- Control/treat noxious weed/invasive plant species by qualified personnel using appropriate methods for the target species (e.g., herbicides applied by licensed personnel);
- Repair temporary or permanent erosion control structures;

- Install additional temporary or permanent erosion control structures; and
- Decompact soils where problematic soil conditions are negatively influencing revegetation efforts.

If the monitors recommend remedial actions, these recommendations will be provided in the annual monitoring report submitted to Perennial. Perennial will make every attempt to implement the recommended remedial actions as soon as possible, considering the season, weather conditions, and other site-dependent constraints. In general, remedial actions should be conducted within 30 days of the problems being identified in the field, if appropriate. However, if actions are needed within a shorter time frame to prevent restoration failure, the monitoring crews will notify Perennial as soon as possible after documentation of problem area (via telephone or email). Perennial will document revegetation progress and remedial actions taken in its Restoration Monitoring Report to the ODFW and ODOE (see Section 5.4).

#### **4.6 Monitoring Schedule**

During the construction phase, monitoring of restoration efforts should be initiated immediately after measures are implemented, as appropriate. Typically, Perennial's environmental inspectors will inspect soils and noxious weed measures (e.g., erosion control and noxious weed treatments) on a daily basis in areas of active construction, or on a weekly basis in other Project areas. In addition, all erosion control techniques and devices will be inspected within 24 hours of any large rain event (0.5 inch or greater). Monitoring for revegetation success will not begin in earnest until the first growing season after the construction phase has been completed.

Post-construction restoration monitoring efforts will be conducted according to the following general guidelines:

- Monitoring for all restoration measures will be conducted concurrently, when possible, and will begin in the first growing season (fall or spring) following the completion of construction and initial restoration and continue annually for up to five years.
- When it is determined that an area of the Project has been successfully restored at any point during years 1 to 5, by satisfying all success criteria, Perennial will request concurrence from ODOE and ODFW. If ODOE and ODFW concur, Perennial will conclude that it has no further obligation to perform revegetation activities in that area of the Project. Where this is the case, the monitoring effort may require fewer than five years.
- If after five years of monitoring (and remedial actions) some sites have not attained restoration success, Perennial will coordinate with ODOE and ODFW regarding appropriate steps forward. At this point Perennial may suggest additional restoration



techniques or strategies, or Perennial may request a waiver from further restoration obligations at these sites.

#### **4.7 Reporting**

Perennial will provide an annual Restoration Monitoring Report to ODOE and ODFW following each monitoring effort. Each annual report will provide a summary of field data collected during field visits and include an assessment of whether restoration efforts are meeting the success criteria. This reports will provide assessments of restoration efforts at each representative monitoring site (i.e., the vegetation monitoring plots), as well as of restoration efforts for the Project as a whole. This will include a description of the restoration status of cultivated lands. The reports will document remedial actions (e.g., seeding, noxious weed control, and repair of erosion control structures) taken to date, additional remedial actions planned for any areas that are not trending towards success, and the anticipated dates of completion of each of these actions.

When Perennial deems an area of the Project successfully restored by satisfying all success criteria, this will be stated in the annual revegetation report. If ODOE and ODFW concur, Perennial will conclude that it has no further obligation to perform revegetation activities in that area of the Project. Therefore, the monitoring effort for some areas of the Project may require fewer than five years. If after five years of monitoring (and remedial actions) some sites have not attained restoration success, Perennial's year 5 annual report will discuss potential steps forward for these sites. Perennial may then seek guidance from ODOE and ODFW for additional restoration techniques or request a waiver from further restoration obligations at these sites. If additional restoration is required, Perennial will continue to provide annual monitoring reports to ODOE and ODFW until efforts are halted.

### **5 AMENDMENT OF PLAN**

Perennial anticipates completing the restoration and re-seeding guidelines provided in this plan; however, the methods and timing could be altered at the request of landowners, the ODFW, and ODOE. This Restoration Monitoring Plan may be amended by agreement of Perennial and ODOE. Amendments will be prepared in consultation with ODOE and ODFW and may be made without altering the site certificate.

**Table 3 Noxious Weeds Observed at the Station Site and in the 50-foot-wide Pipeline Right-of-Way**

<b>ID</b>	<b>Species</b>	<b>Location (milepost)</b>	<b>Cover</b>	<b>Diameter</b>
NW-003-008	Diffuse knapweed	0.23	6–25%	300+ feet
NW-003-009	Diffuse knapweed	0.23	<1%	100 feet
NW-003-007	Scotch thistle	0.24	<1%	150 feet
NW-003-006	Scotch thistle	0.32	<1%	150 feet
NW-003-003	Diffuse knapweed	0.5	<1%	100 feet
NW-003-004	Scotch thistle	0.5	<1%	100 feet
NW-003-005	Kochia	0.5	26–50%	50 feet
NW-003-012	Puncturevine	0.5	1–5%	300+ feet
NW-001-013	Cereal rye	0.59	<1%	300+ feet
NW-001-012	Cereal rye	1.28	<1%	300+ feet
NW-003-001	Diffuse knapweed	1.29	<1%	10 feet
NW-003-002	Kochia	1.29	<1%	single plant
NW-001-010	Cereal rye	1.35	<1%	300+ feet
NW-001-011	Scotch thistle	1.35	<1%	single plant
NW-001-009	Cereal rye	1.55	1–5%	300+ feet
NW-001-007	Scotch thistle	2.06	<1%	50 feet
NW-001-008	Cereal rye	2.06	<1%	50 feet
NW-001-006	Cereal Rye	2.32	26–50%	300+ feet
NW-001-005	Quackgrass	2.51	<1%	100 feet
NW-001-004	Quackgrass	2.93	<1%	300+ feet
NW-001-003	Quackgrass	3.05	<1%	300+ feet
NW-001-002	Quackgrass	3.34	<1%	300+ feet
NW-001-001	Scotch thistle	4.68	<1%	300+ feet
NW-001-014	Scotch thistle	Facility Site	<1%	300+ feet
NW-001-015	Scotch thistle	Facility Site	<1%	150 feet
NW-001-016	Scotch thistle	Facility Site	<1%	150 feet
NW-001-017	Cereal rye	Facility Site	<1%	150 feet
NW-003-010	Kochia	Facility Site	<1%	10 feet
NW-003-011	Diffuse knapweed	Facility Site	6–25%	300+ feet
NW-003-014	Diffuse knapweed	Interconnect	1–5%	50 feet

\*Noxious weed populations were recorded during field survey in 2013. Conditions at time of construction are expected to differ slightly.

**Table 4 Seed Mixes for Temporarily Disturbed Project Areas**

<b>Vegetation Type</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>PLS (pounds per acre<sup>1,2</sup>)</b>	<b>Description/Purpose</b>
Seed Mix 1: Agricultural (irrigated, dryland, and pastures)	Wheat or other crop seed, at the request of landowner.		At landowner request	(EC)
Seed Mix 2: Disturbed native grasslands	Secarbluebunch wheatgrass	<i>Pseudoregneriaspicata</i>	6	(N) (EC) (F)
	Sherman big bluegrass	<i>Poaampla</i>	1.5	(N) (F)
	Sandberg's bluegrass	<i>Poaecunda</i>	2.0	(N) (F)
	Small burnet	<i>Sanguisorba minor</i>	2.0	(I) (F)
	Great Basin wildrye*	<i>Elymuscinereus</i>	1.0	(N) (EC) (F)
	Needle and thread grass*	<i>Hesperostipacomata</i>	1.0	(N) (EC) (F)
	Western yarrow*	<i>Achilleamillefolium var. occidentalis</i>	1.0	(N) (F)
Seed Mix 3: Shrub-steppe	Secarbluebunch wheatgrass	<i>Pseudoregneriaspicata</i>	6	(N) (EC) (F)
	Sherman big bluegrass	<i>Poaampla</i>	1.5	(N) (F)
	Sandberg's bluegrass	<i>Poaecunda</i>	2.0	(N) (F)
	Ladak alfalfa	<i>Medicago sativa</i>	1.0	(I) (F)
	Small burnet	<i>Sanguisorba minor</i>	2.0	(I) (F)
	Great Basin wildrye*	<i>Elymuscinereus</i>	1.0	(N) (EC) (F)
	Needle and thread grass*	<i>Hesperostipacomata</i>	1.0	(N) (EC) (F)
	Western yarrow*	<i>Achilleamillefolium var. occidentalis</i>	1.0	(N) (F)
	Big sagebrush*	<i>Artemisia tridentata</i>	1.0	(N) (F)

Key:

(N) = Native, (I) = Introduced, (EC) = Erosion Control, (F) = Forage

\* Optional species depending on site and availability

<sup>1</sup> PLS = pure live seed<sup>2</sup> Final pounds/acre may change at the request of the landowners or the ODFW

## 6 REFERENCES

- ODA (Oregon Department of Agriculture). 2013. Noxious Weed Policy and Classification System 2013. Oregon Department of Agriculture Noxious Weed Control Program. Salem, Oregon, 2013.
- ODOE (Oregon Department of Energy). 2007. Biglow Canyon Wind Farm: Revegetation Plan. March 10, 2007. Available at:  
[http://www.oregon.gov/energy/Siting/docs/BCW/BCW\\_final\\_order\\_063006.pdf](http://www.oregon.gov/energy/Siting/docs/BCW/BCW_final_order_063006.pdf)
- \_\_\_\_\_. 2006. Klondike III Wind Project: Revegetation Plan. June 30, 2006. Available at:  
<http://www.oregon.gov/energy/Siting/docs/KWP/KWPOB.pdf>
- Umatilla County Noxious Weed Control. 2012. Umatilla County 2011 Noxious Weed List. Pendleton, Oregon.





- Existing Transmission Line
- Underground Transmission Line
- Step-up Substation

- Noxious Weeds\*
- Cereal Rye
  - Quackgrass
  - Scotch Thistle
  - Diffuse Knapweed
  - Kochia
  - Puncturevine
- Cereal Rye Extent
  - Quackgrass Extent
  - Scotch Thistle Extent
  - Kochia
  - Diffuse Knapweed
  - Puncturevine

\*The approximate extent of each observed population and its associated GPS points is mapped within Project ROWs

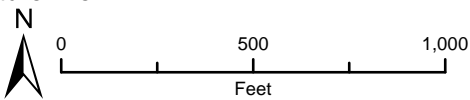
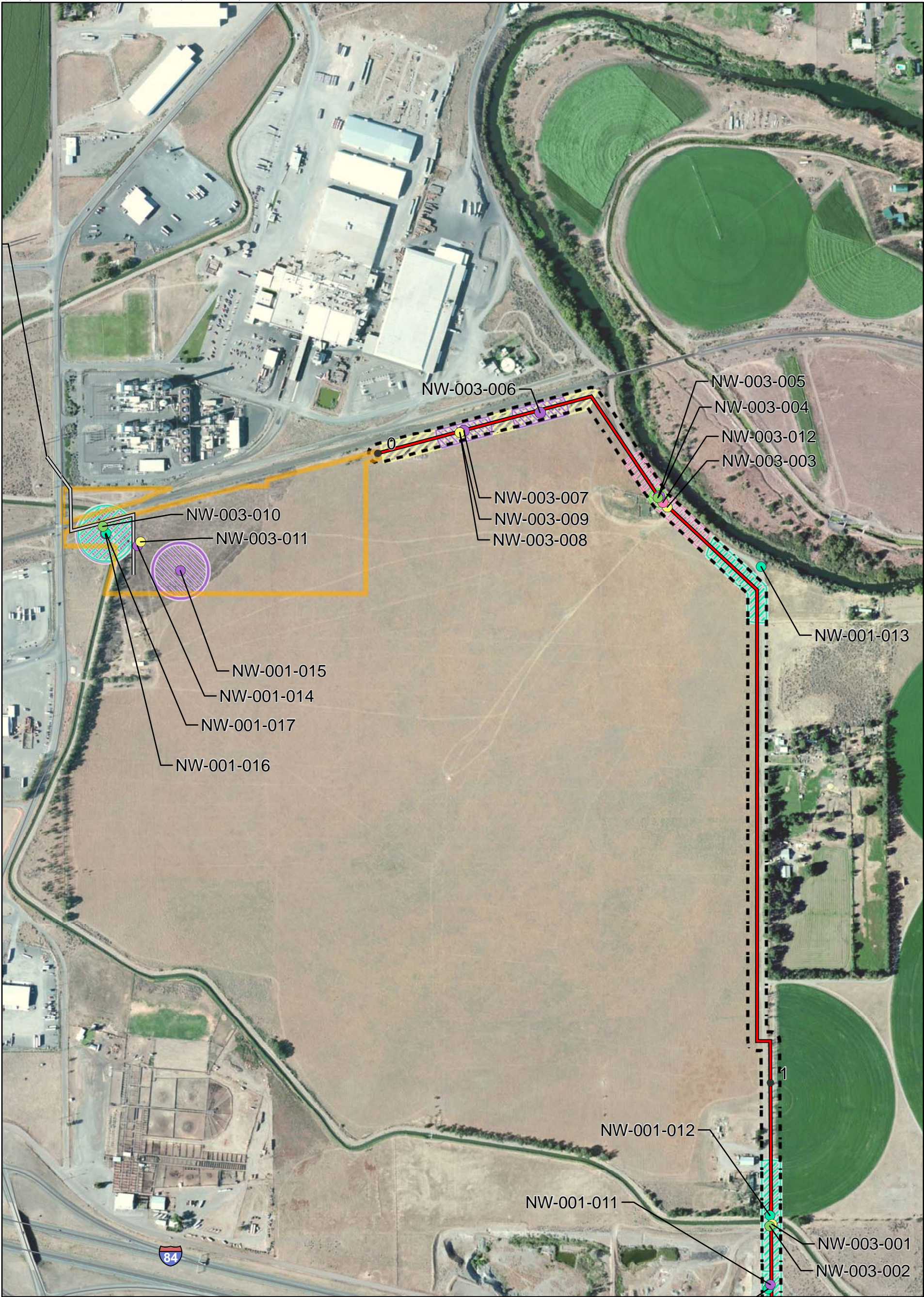


Figure 1a

Noxious Weeds Observed  
in the Proposed Facility Site,  
Step-up Substation,  
and 50-foot-wide ROW

Perennial Wind Chaser Station





Existing Transmission Line

New Overhead Transmission Line

Natural Gas Pipeline

Natural Gas Pipeline

50-foot Buffer

Station

Noxious Weeds\*

Cereal Rye

Quackgrass

Scotch Thistle

Diffuse Knapweed

Kochia

Puncturevine

Cereal Rye Extent

Quackgrass Extent

Scotch Thistle Extent

Kochia

Diffuse Knapweed

Puncturevine

Figure 1b

Noxious Weeds Observed in the Proposed Facility Site and 50-foot-wide ROW

Perennial Wind Chaser Station

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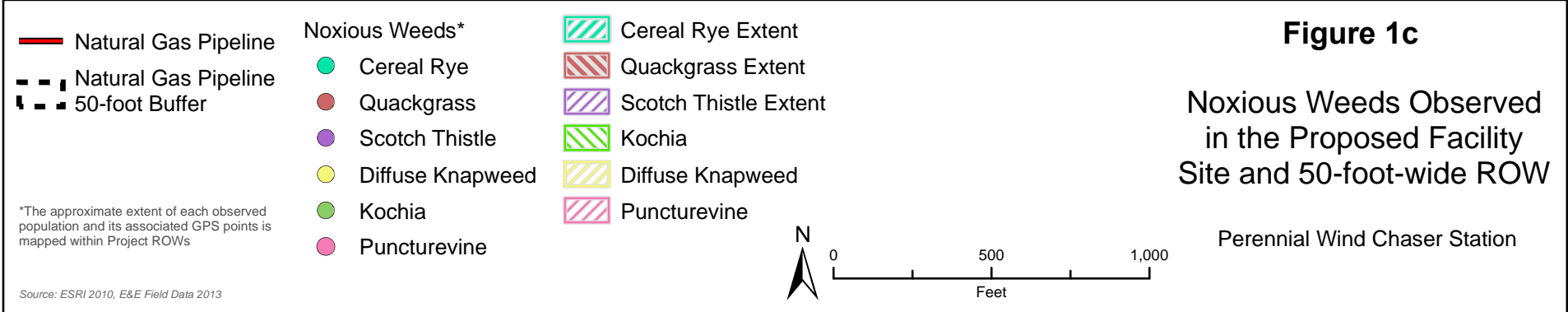
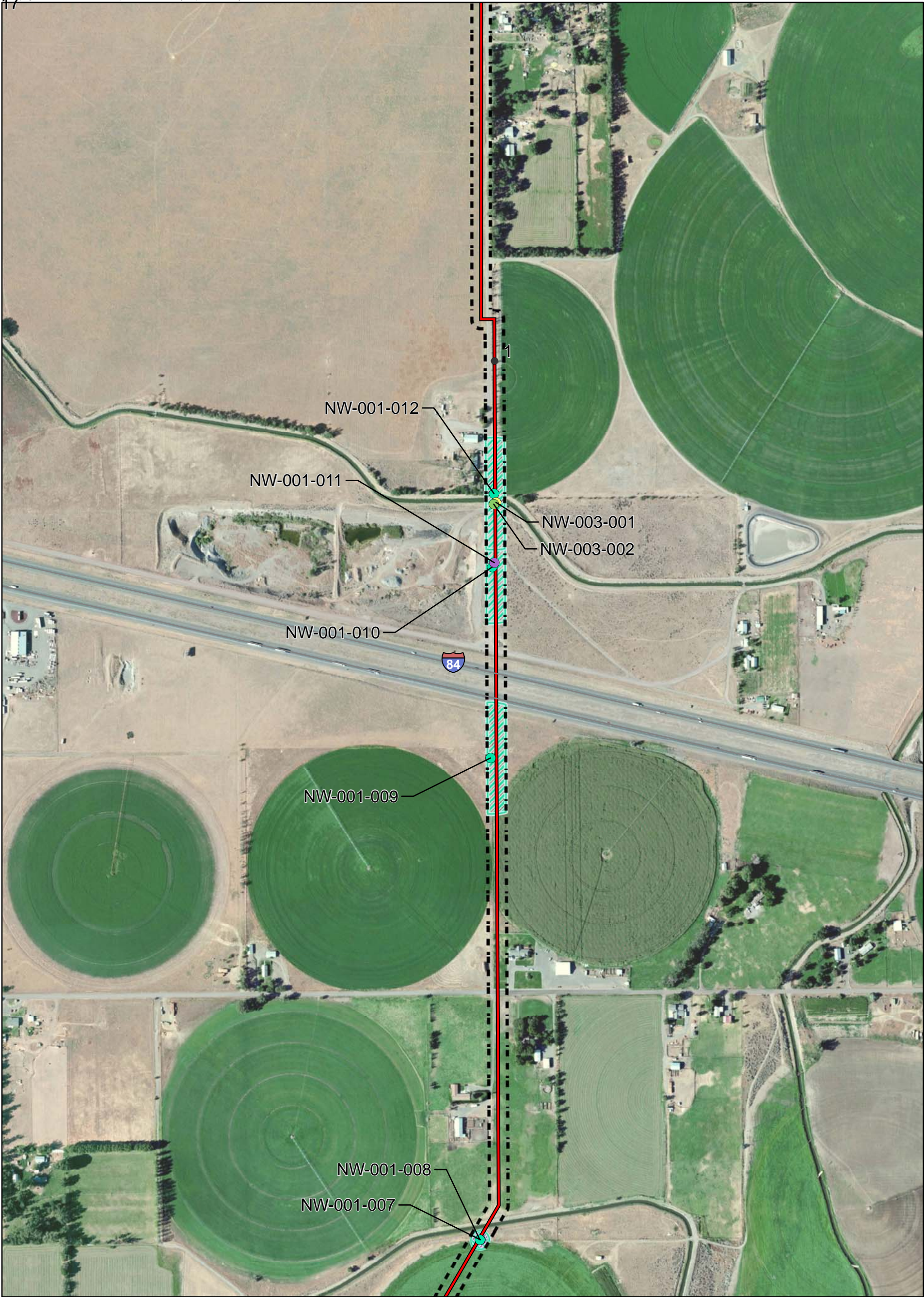
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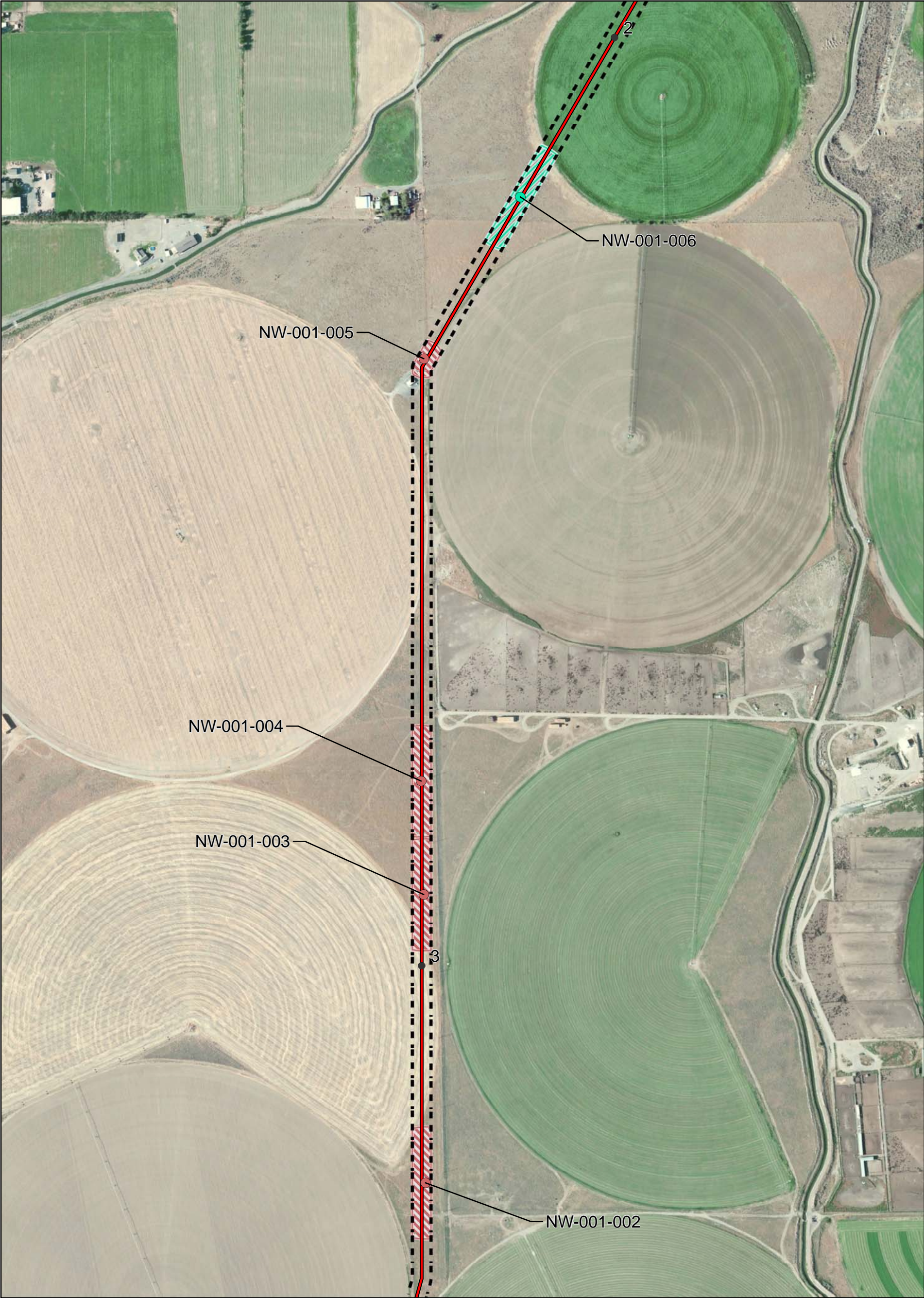
Feet

\*The approximate extent of each observed population and its associated GPS points is mapped within Project ROWs  
Source: ESRI 2010, E&E Field Data 2013









— Natural Gas Pipeline  
- - - Natural Gas Pipeline  
- - - 50-foot Buffer

Noxious Weeds\*

- Cereal Rye
- Quackgrass
- Scotch Thistle
- Diffuse Knapweed
- Kochia
- Puncturevine

- ▨ Cereal Rye Extent
- ▨ Quackgrass Extent
- ▨ Scotch Thistle Extent
- ▨ Kochia
- ▨ Diffuse Knapweed
- ▨ Puncturevine

\*The approximate extent of each observed population and its associated GPS points is mapped within Project ROWs

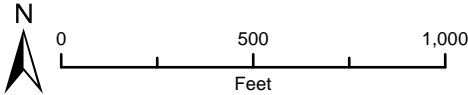


Figure 1d

Noxious Weeds Observed  
in the Proposed Facility  
Site and 50-foot-wide ROW

Perennial Wind Chaser Station





— Natural Gas Pipeline  
- - - Natural Gas Pipeline  
- - - 50-foot Buffer

Noxious Weeds\*

- Cereal Rye
- Quackgrass
- Scotch Thistle
- Diffuse Knapweed
- Kochia
- Puncturevine

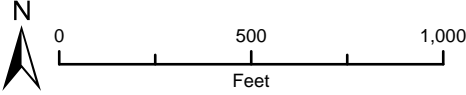
- ▨ Cereal Rye Extent
- ▨ Quackgrass Extent
- ▨ Scotch Thistle Extent
- ▨ Kochia
- ▨ Diffuse Knapweed
- ▨ Puncturevine

\*The approximate extent of each observed population and its associated GPS points is mapped within Project ROWs

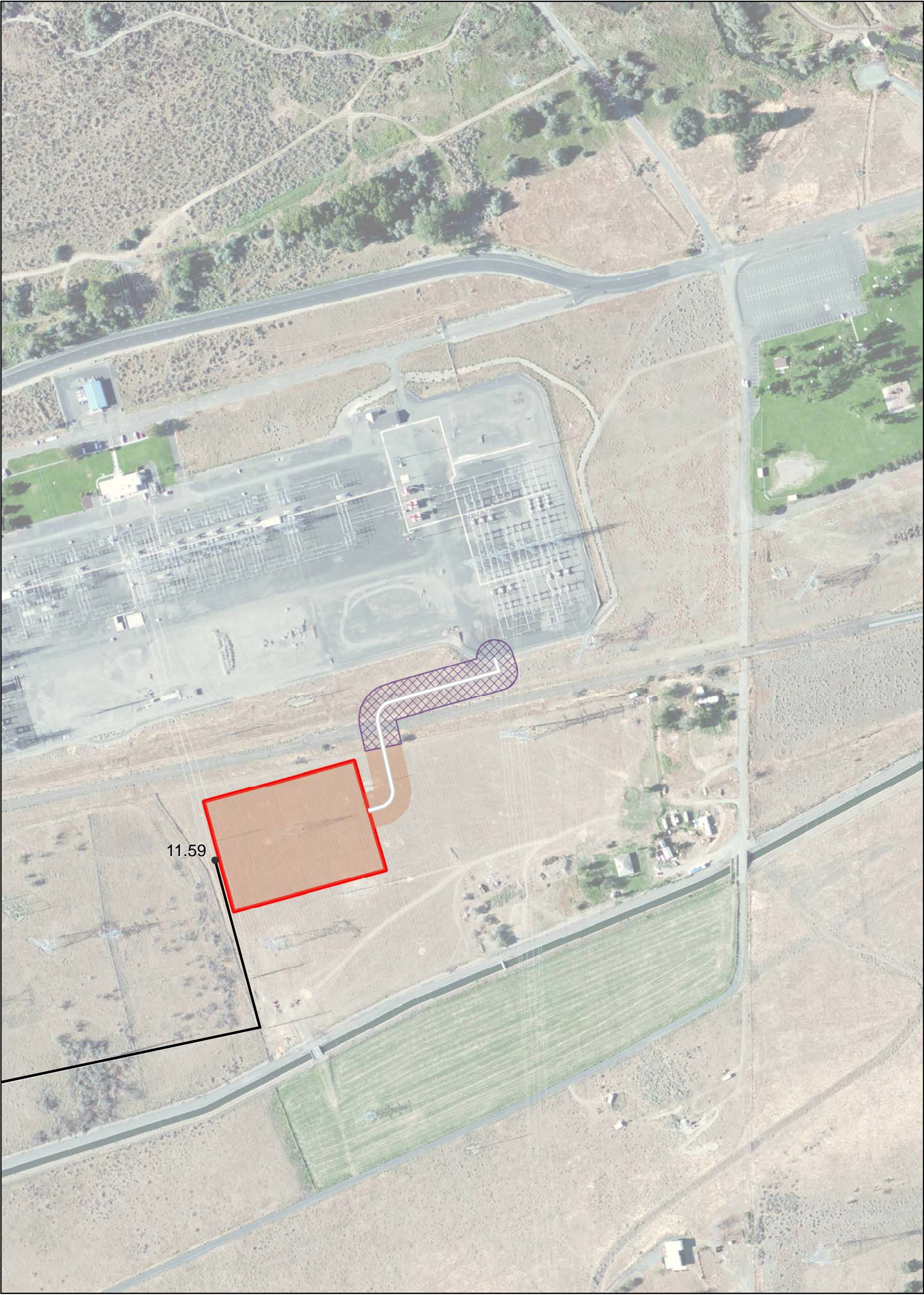
Figure 1e

Noxious Weeds Observed  
in the Proposed Facility  
Site and 50-foot-wide ROW

Perennial Wind Chaser Station







- Mileposts

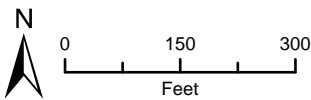
— Existing Transmission Line

— Underground Transmission Line

□ Step-up Substation
- Field Data - Habitat

Weedy Grassland #5

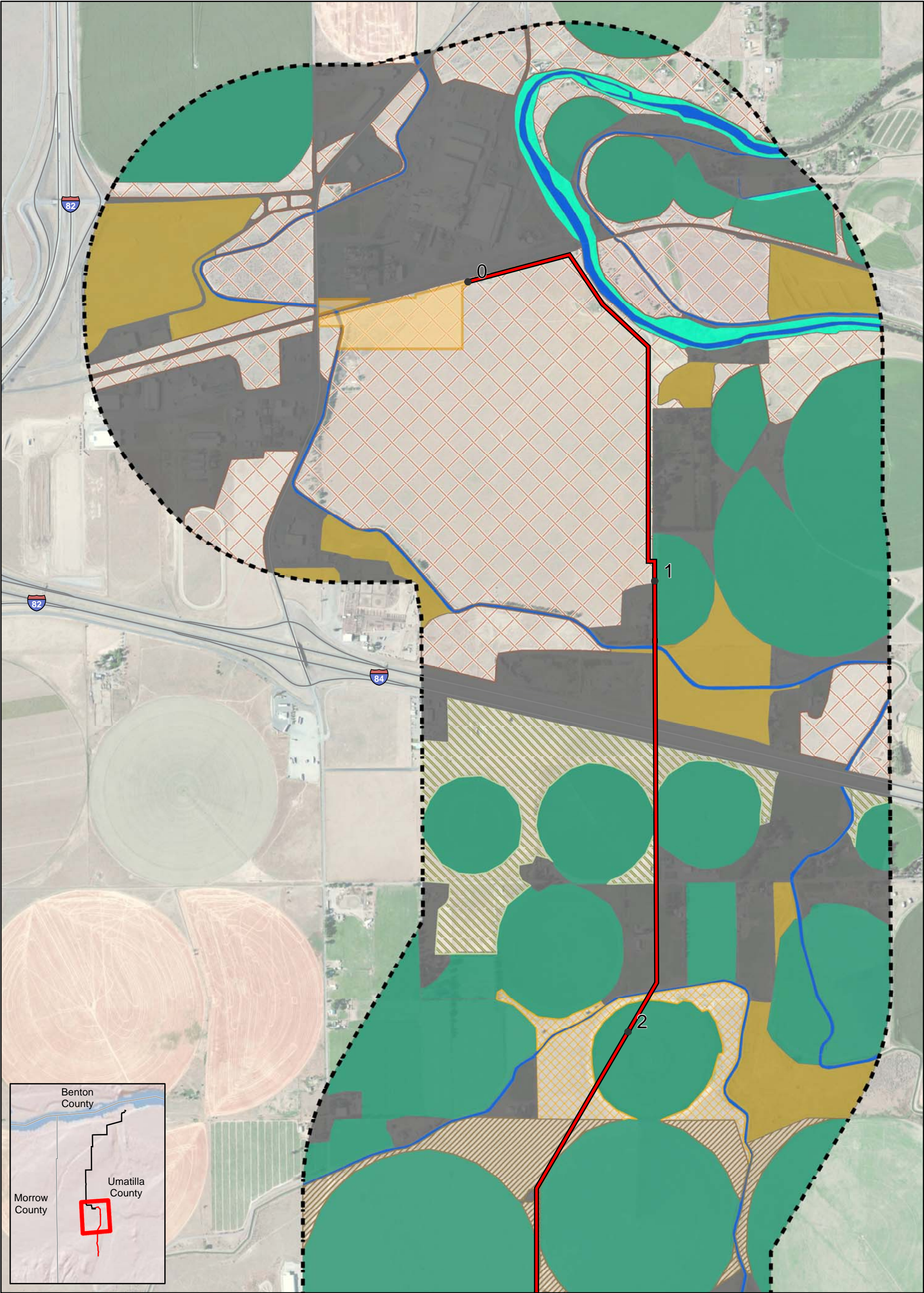
Weedy Grassland #6



Source: ESRI 2010, E&E Field Data 2013

**Figure &**  
Field Mapped Habitats  
of the Proposed Step-up  
Substation and Its Associated  
Underground Transmission Line  
  
Perennial Wind Chaser Station

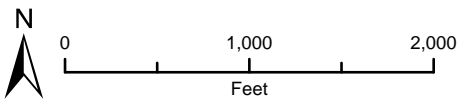




- Mileposts
  - Natural Gas Pipeline
  - - - 0.5-mile Buffer
  - Station
- | Field Data - Habitat |                      |
|----------------------|----------------------|
| ■ Agriculture        | ■ Shrub Steppe       |
| ■ Developed          | ■ Weedy Grassland #1 |
| ■ Open Water         | ■ Weedy Grassland #2 |
| ■ Riparian           | ■ Weedy Grassland #3 |
|                      | ■ Weedy Grassland #4 |

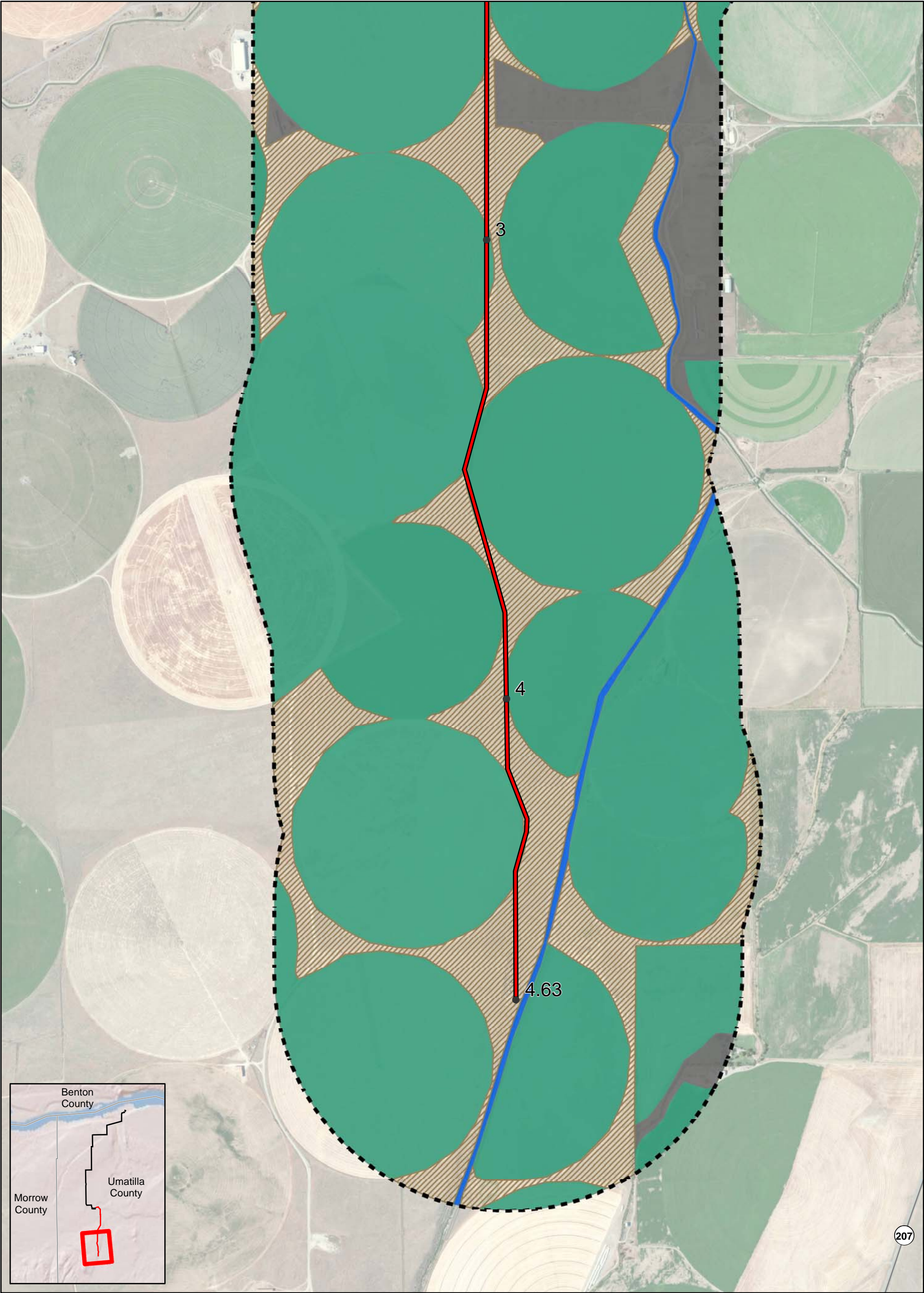
Figure 3U

Field Mapped Habitats  
within 0.5 Mile of the  
Proposed Facility Site and  
50-foot-wide Pipeline ROW



Perennial Wind Chaser Station





- Mileposts

Natural Gas Pipeline

0.5-mile Buffer

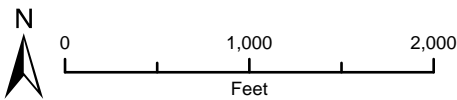
Station
- Field Data - Habitat

Agriculture

Developed

Open Water

Weedy Grassland #1



**Figure 3V**

Field Mapped Habitats  
within 0.5 Mile of the  
Proposed Facility Site and  
50-foot-wide Pipeline ROW

Perennial Wind Chaser Station

Appendix D  
Perennial Wind Chaser Station  
Biological Monitoring Plan

# **Perennial Wind Chaser Station**

## **Biological Monitoring Plan**

**October 2014**

### **Prepared for:**

**Perennial-WindChaser LLC**

300 Madison Avenue  
New York, NY 10017

### **Prepared by:**

**Ecology and Environment, Inc.**

333 SW Fifth Avenue, Suite 600  
Portland, Oregon 97204

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## **1 INTRODUCTION**

This Biological Monitoring Plan outlines the goals, methods, and criteria that Perennial WindChaser LLC will use to evaluate and track the success of mitigation measures designed to avoid or minimize impacts on plants and wildlife and their habitats resulting from the Perennial Wind Chaser Station project (Project). These include, but are not limited to, the following types of measures: environmental training; general habitat and wildlife impacts reduction practices; pre-construction surveys for sensitive wildlife; and seasonal and spatial disturbance buffers for active migratory bird nests or other known special-status species locations.

This plan addresses monitoring procedures to be conducted during the construction phase of the Project. Habitat restoration measures will be monitored by Perennial's post-construction monitoring crews, as described in the Project Restoration Monitoring Plan (Exhibit P, Appendix P3).

The goals of the biological mitigation measures and monitoring procedures are to:

1. Avoid or minimize impacts on habitat and native wildlife in general as a result of construction and operation of the Project; and
2. Avoid impacts on special-status plant and wildlife species that may result from construction and operation of the Project.

This plan summarizes the biological mitigation measures that will be implemented during and after construction of the Project. These measures are discussed in more detail in Exhibit P, Fish and Wildlife Habitat and Exhibit Q, Threatened and Endangered Species. The monitoring procedures described in this plan supersede any monitoring procedures discussed in these other documents. This plan has been reviewed and approved by the United States Fish and Wildlife Service (USFWS), the Oregon Department of Energy (ODOE), and the Oregon Department of Fish and Wildlife (ODFW).

## **2 SITE DESCRIPTION AND NATURE OF IMPACTS**

The Project will be located on private lands in Umatilla County, Oregon. The Project's Energy Facility Site is located in an agricultural field that is surrounded on three sides by roads, railroads, industrial property (Hermiston Generating Plant and Lamb-Weston agricultural processing plant), light industrial property (FedEx package distribution facility), and a large cattle stock yard. A natural gas pipeline is to be constructed within an existing 50-foot right-of-way, also primarily on agricultural land, that extends south for 4.63 miles. An existing transmission line will be upgraded (reconductored) to accommodate the Project (requiring only two new poles at the north boundary of the Station), and a new step-up substation will be



constructed on agricultural land adjacent to the Bonneville Power Administration's existing McNary Substation.

The Project is expected to impact 60.15 acres total: 23.48 acres at permanent aboveground facilities and 36.67 acres at temporary impacts areas. These impacts include 2.03 acres of temporary disturbance in shrub-steppe habitat, 22.36 acres of temporary impacts on weedy grasslands, and 22.03 acres of permanent impacts on weeds grasslands.

In most cases, the intensity of construction impacts on vegetation and habitat in temporary disturbance areas will be low and will be limited to the flattening of vegetation by rubber-tired vehicles. In some instances, the intensity of impacts in temporary disturbance areas will be higher and will require the removal of topsoil and vegetation for grading, excavation, or drilling activities. Most of the shrub-steppe and grassland habitats present in the Project area were heavily disturbed prior to construction and supported a large proportion of non-native plants (including a high abundance of cheatgrass).

### **3 SUMMARY OF RESTORATION MEASURES**

The following sections summarize the measures to be implemented during construction of the Project that may be relevant to monitoring procedures. These sections are intended for use as a reference by field monitoring personnel.

#### **3.1 General Fish and Wildlife Habitat Measures**

The goal of the general fish and wildlife habitat measures is to avoid or minimize impacts on plants and wildlife and their habitats.

The following measures will be implemented by Perennial to avoid and/or minimize impacts on fish, wildlife, and their habitats:

- All Project personnel will attend an environmental training session prior to entering the Project right-of-way. The training will cover topics related to the Project's environmental compliance, including, but not limited to, approved Project boundaries and access roads; sensitive wetland and waterbody resources; special-status plant and wildlife species; basic avoidance and minimization measures that Perennial will implement for the Project; the role of onsite biologist or monitors; the notification process to be followed if workers identify new sensitive resources; the major environmental laws and regulations that apply to the Project; and the penalty for not complying with laws or regulations.
- The Project will be designed, constructed, maintained, and operated following current Avian Power Line Interaction Committee guidelines to minimize risk of avian mortality.

- Any herbicides used during construction and operations and maintenance will be applied according to label instructions and any federal, state, and local regulations.
- Perennial will restrict vehicular travel to the right-of-way and other established areas within the construction, access, or maintenance easement(s).
- Roads not otherwise needed for maintenance and operations will be restored to pre-construction conditions, to the extent practicable.
- Every construction crew will carry appropriate emergency spill response equipment. If a spill occurs, the crew will temporarily halt work to contain and clean up the material and eliminate the source of the spill before resuming work.
- Perennial will restrict the refueling and maintenance of vehicles and the storage of fuels and hazardous chemicals within at least 100 feet of wetlands, surface waterbodies, and groundwater wells, or as otherwise required by federal, state, or local regulations.
- Perennial will conduct construction and scheduled maintenance activities during daylight hours, to the extent practicable.
- Perennial will impose speed limits during construction for access roads to reduce dust emissions, maintain safety, and protect wildlife.
- Perennial will restore all temporary construction-related areas to pre-construction conditions or better after work has been completed.
- Perennial will minimize compaction of soils and rutting through appropriate use of construction equipment (e.g., low ground-pressure equipment and temporary equipment mats).
- Perennial will minimize the amount of time that any excavations remain open.
- Perennial will identify, control, and minimize the spread of non-native invasive species and noxious weeds, to the extent practicable.
- Perennial will clearly demarcate boundaries of environmentally sensitive areas during construction to increase visibility to construction crews.
- Nesting raptors: If construction-related activities occur during the raptor breeding season (February 1 through August 31), pre-construction surveys will be conducted within 0.5 miles of all proposed Project features for ferruginous hawk (*Buteo regalis*) nests, and within 0.25 miles for all other raptor species nests, including burrowing owl (*Athene cunicularia*) burrows. If active nests are located, construction-related activities would be restricted within 0.5 miles of ferruginous hawk nests and 0.25 miles of all other raptor nests until the nests have failed or chicks have fledged. A biologist will monitor the status of the active nests daily during nearby active construction and document potential adverse interactions with the Project. Spatial restrictions around active raptor nests may be reduced through consultation with ODFW and the USFWS when considering factors

such as the visibility of the Project from the nest, topography, existing human disturbances, and the presence of nest monitors.

- Nesting migratory bird species (non-raptor): If construction-related activities occur during the migratory bird breeding season (March 15 through August 15) for Lewis's woodpecker (*Melanerpes lewis*), willow flycatcher (*Empidonax traillii adastus*), yellow-breasted chat (*Icteria virens*), tricolored blackbird (*Agelaius tricolor*), and other bird species, pre-construction surveys will be conducted within 20 feet of all proposed Project features for nests of all native, non-raptor species. Given the diversity of species potentially occurring in the vicinity of the Project, their varying nest initiation dates, and the possibility of multiple clutches by some species, pre-construction nest surveys for non-raptors will be valid for two weeks. If active nests are located, the Project will consult ODFW and USFWS to determine appropriate measures to take, which may include limiting construction-related activities within 20 feet of the nests until the nests have failed or chicks have fledged, and/or continuing proposed activities with the presence of a biological monitor. A biologist will monitor the status of active nests daily during nearby active construction and document potential adverse interactions with the Project.
- If the roost of a California myotis (*Myotis californicus*), an Oregon sensitive species, is observed incidentally during other biological surveys of the right-of-way, Perennial will consult ODFW to determine what, if any, appropriate measures to take. Potential measures include implementing a spatial disturbance buffer and/or continuing proposed activities with the presence of a biological monitor.
- If construction occurs during important time periods (e.g., breeding, migration, etc.) or at close distances to environmentally sensitive areas, Perennial will consult with the USFWS, ODFW, and Oregon Department of Agriculture (ODA) for guidance on seasonal and/or spatial restrictions designed to avoid and/or minimize adverse effects.
- Perennial will establish streamside management zones within 50 feet of both sides of intermittent and perennial streams and along margins of bodies of open water where removal of low-lying vegetation is minimized.
- Perennial will selectively apply herbicides, if used, within streamside management zones.

### **3.2 Threatened and Endangered Species Measures**

The following measures will be implemented by Perennial to avoid and/or minimize impacts on federal and state threatened and endangered species:

- Fish: To avoid or minimize impacts on steelhead (Middle Columbia River, [*Onchorhynchus mykiss*]), bull trout (*Salvelinus confluentus*), margined sculpin (*Cottus marginatus*), Pacific lamprey (*Lampetra tridentata*), and other fish species, Perennial will establish streamside management zones within 50 feet of both sides of intermittent and

perennial streams where removal of low-lying vegetation is minimized. The pipeline right-of-way crosses three irrigation canals, but no streams or rivers; however, it does come close to the Umatilla River.

- Northern sagebrush lizard (*Sceloporus graciosus graciosus*): Perennial will survey for northern sagebrush lizard in areas of sagebrush and other shrubby habitat that will be impacted by ground disturbance. If northern sagebrush lizards are discovered, Perennial will consult with the USFWS, ODFW, and ODA for guidance on seasonal and/or spatial restrictions designed to avoid or minimize adverse effects.
- Bats: For small-footed myotis (*Myotis ciliolabrum*), long-eared myotis (*Myotis evotis*), long-legged myotis (*Myotis volans*), Yuma myotis (*Myotis yumanensis*), and pallid bat (*Antrozous pallidus*), Perennial will examine any structures (cliffs, caves, mines, fissures, under boulders, buildings, under bridges, and trees) within the construction corridor that could potentially be roost sites. If any bat roosts are discovered, Perennial will consult with the USFWS, ODFW, and ODA for guidance on seasonal and/or spatial restrictions designed to avoid or minimize adverse effects.
- Washington ground squirrel (*Urocitellus washingtoni*): Pre-construction surveys will be conducted prior to any ground disturbance in areas with suitable habitat. If any Project components that require ground disturbance are located within 1,000 feet of potential Washington ground squirrel habitat (excluding tilled agricultural lands or developed areas), Perennial's biologists will conduct transect surveys to determine if squirrels are present, as land access allows. These surveys will follow the protocols coordinated with the ODFW and detailed in the 2013 Biological Resources Survey Report (Exhibit P, Appendix P-1). If Washington ground squirrels are found within the 1,000-foot buffer, ODFW and USFWS will be consulted to determine the best mitigation measures to avoid or reduce adverse impacts. Potential measures include prohibiting or restricting construction-related activities within an appropriate buffer, or continuing proposed activities with the presence of a biological monitor.
- Robinson's onion (*Allium robinsonii*) and Laurence's milkvetch (*Astragalus collinus var. laurentii*): Pre-construction surveys will be conducted for Robinson's onion and Laurence's milkvetch prior to any ground disturbance in areas with suitable habitat. If any individuals of these plants are discovered, Perennial will consult with the USFWS, ODFW, and ODA for guidance on spatial restrictions designed to avoid or minimize adverse effects.

#### **4 MONITORING PROCEDURES**

Perennial will monitor the implementation and effectiveness of biological mitigation measures during construction. Potential impacts on biological resources as a result of constructing the Project are expected to be temporary and short term after implementation of the measures

summarized above and should dissipate soon after completion of construction as sites are restored and revegetated. Therefore, these measures will be monitored during the construction phase of the Project.

Perennial's onsite environmental inspectors will oversee the implementation of, and inspect, the general fish and wildlife mitigation measures listed above that do not involve plant or wildlife surveys or onsite construction monitoring. In general, impacts avoidance measures and techniques, such as erosion control measures, demarcation of sensitive areas, will be inspected on a daily basis in areas of active construction. In Project areas where construction is not actively occurring, these inspections will take place at least once per week.

Perennial will provide qualified biologists to conduct pre-construction surveys for special-status species in areas where suitable habitat is present. Threatened and endangered species that may require pre-construction surveys include Washington ground squirrel and Laurence's milkvetch. Pre-construction surveys will also include searches for nesting raptors and other migratory bird species. If active nests are observed, Perennial will coordinate with the USFWS and ODFW to determine what seasonal and spatial disturbance buffers are needed. If agency-required nest disturbance buffers intersect the Project area, biological monitors will monitor the nests until eggs have hatched and chicks have fledged and left the nest area. In some cases, the USFWS and ODFW may approve working within a typical disturbance buffer for an active nest, provided that a biological monitor remains onsite throughout construction in that area to monitor for altered behavior of the nesting bird. The environmental inspectors and biological monitors will coordinate on a daily basis, or as needed, to ensure compliance with all Project environmental conditions and regulatory requirements pertaining to sensitive plants and wildlife, and their habitats.

Post-construction studies by Perennial's restoration monitoring crews will assess the success of habitat restoration efforts. Therefore, this Biological Monitoring Plan does not address monitoring beyond the construction phase of the Project.

#### **4.1 Remedial Action and Maintenance**

Following the inspection or monitoring of biological measures, as described above, Perennial's environmental inspectors or biological monitors may suggest and implement corrective actions. Common corrective measures may include, but are not limited to, additional environmental training of Project personnel, adjustment of nest buffers at approval of agencies, further reduction of speed limits in specific Project areas, addition of biological monitors to specific crews or Project areas, and installation of additional signage.

If the monitors or environmental inspectors recommend remedial actions, these recommendations will be provided in the daily report to Perennial. Perennial will make every attempt to implement the recommended remedial actions as soon as possible, considering the

season, weather conditions, and other site-dependent constraints. In general, remedial actions for plant and wildlife impacts avoidance should be implemented within 24 hours, if not immediately by the inspector or monitor. Perennial will document the implementation and monitoring of biological measures.

#### **4.2 Monitoring Schedule**

Monitoring and inspection of biological mitigation measures will begin prior to construction when pre-construction surveys are conducted and will continue through completion of construction. In general, impacts avoidance measures and techniques, such as erosion control measures, demarcation of sensitive areas, will be inspected on a daily basis in areas of active construction. In Project areas where construction is not actively occurring, these inspections will occur at least once per week. When biological resources (e.g., active migratory bird nests) require onsite monitoring, this will typically occur on a daily basis, or as appropriate.

#### **4.3 Reporting**

Perennial will provide monthly status reports during construction to ODOE, USFWS, and ODFW that report any adverse interactions between Project construction and sensitive plants and wildlife. Within two months of completion of the construction phase of the Project, Perennial will submit a final Project report to ODOE, USFWS, and ODFW that summarizes all plant and wildlife impacts, habitat impacts, mitigation measures implemented, and the results of inspection and monitoring during construction, including any corrective actions that were implemented.

### **5 AMENDMENT OF PLAN**

Perennial anticipates completing the procedures provided in this plan; however, the methods and timing could be altered at the request of USFW and ODFW. This Biological Monitoring Plan may be amended by agreement of Perennial and ODOE. Amendments will be prepared in consultation with USFWS and ODFW and may be made without altering the site certificate.

Appendix E  
Perennial Wind Chaser Station  
Draft Memorandum of  
Understanding

**MEMORANDUM OF UNDERSTANDING**  
**THE CLIMATE TRUST AND PERENNIAL-WINDCHASER, LLC**  
**CARBON DIOXIDE STANDARD IMPLEMENTATION**  
**MONETARY PATH PAYMENT REQUIREMENT**  
  
**WITH A STANDBY LETTER OF CREDIT**

THIS MEMORANDUM OF UNDERSTANDING (this “Agreement”) is entered into as of the \_\_\_\_ day of \_\_\_\_\_, 201\_, by and between Perennial-WindChaser, LLC (the “Project Owner”) in its capacity as owner of the Perennial Wind Chaser Station, and The Oregon Climate Trust (“The Trust”).

**RECITALS**

1. The Project Owner intends to design, finance, and construct, own and operate a natural gas-fired combustion turbine electric generating facility capable of generating up to a total nominal electric power output of about 415 MW in Umatilla County, Oregon (“the Facility”).
2. The State of Oregon requires new energy facilities to meet a carbon dioxide emissions standard as described in OAR 345-024-0550 through -0710. This is a non-base load power plant, as described in OAR 345-0245-0590.
3. As a condition to the siting of the Facility, the Project Owner is required to provide offset funds (“Offset Funds”) and selection and contracting funds (“Selection and Contracting Funds”) to The Trust. In accordance with Condition PRE-CD-06 (Final Order Condition S.6) of the Site Certificate for the Perennial Wind Chaser Station (the “Site Certificate”) that the Oregon Energy Facility Siting Council (the “Council”) granted to the Project Owner, dated XXXX, the Project Owner shall establish a third-party standby letter of credit (the “Letter of Credit”) in The Trust’s name, acceptable to the Council, sufficient to meet the monetary path requirement. Under the terms and conditions of this Agreement, the monetary path payments shall be disbursed to The Trust as specified in the Site Certificate and by The Trust as specified in OAR 345-024-0710.
4. The Trust is a qualified organization within the meaning of OAR 345-001-0010(46).

NOW, THEREFORE, in consideration of the premises and mutual promises herein contained, the parties hereto agree as follows:

- 1. Initial Non-Base Load Monetary Path Payment for the Facility.**



- 1.1 The Project Owner has used the monetary path payment requirement calculations described in Conditions PRE-CD-02 (Final Order Condition S.2) and PRE-CD-03 (Final Order Condition S.3) of the Site Certificate to calculate the Initial Non-Load Monetary Path Payment amount for the Facility and has submitted them to the Oregon Department of Energy (the "Department") for verification. The Site Certificate requires that all monetary path payment be adjusted for inflation to the date of disbursement to The Trust using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, published in the then current "Oregon Economic and Revenue Forecast" (the "Index"). The Project Owner and the Trust acknowledge that the calculation of the Initial Non-Base-Load Monetary Path Payment in [Index date] dollars presented in Appendix A is correct and consistent with the Site Certificate.
- 1.2 Based on the calculations of the Initial Non-Base Load Monetary Path Payment amount set forth in Appendix A, the Project Owner shall pay to The Trust the Inflation-Adjusted Selection and Contracting Funds in the amount of \$ \_\_\_\_\_ before beginning construction of the Project. The Site Certificate requires that the amount of the Selection and Contracting Funds portion of the Initial Non-Base Load Monetary Path Payment be adjusted for inflation to the date of disbursement to the Trust using the Index.
- 1.3 Based on the verified calculations of the Initial Non- Base-Load Monetary Path Payment set forth in Appendix A, the Project Owner shall pay to the Trust \$ \_\_\_\_\_ in inflation-adjusted Offset Funds. The Site certificate requirements that the amount of the Offset Funds portion of the Initial non-base load monetary path payment be adjusted for inflation to the date of disbursement to the Trust using the Index.
- 1.4 The Project Owner shall establish a Letter of Credit in the amount of \$ \_\_\_\_\_ in favor of The Trust, in the form attached as Appendix B to this Agreement. The effective date of the Letter of Credit shall be on or prior to the date on which Project Owner commences construction of the Project. The Trust shall be entitled to draw the entire amount of the Offset Funds secured by the Letter of Credit pursuant to Section 1.6 or Section 1.7 below and the terms of the Letter of Credit. The Project Owner shall pay the costs of establishing and maintaining the Letter of Credit and shall pay any transaction fees assessed by the issuer of the Letter of Credit.
- 1.5 The Trust shall have the right to request Offset Funds from the Project Owner as provided in ORS 469.503(2)(d)(A) upon execution of a letter of intent to acquire an offset project. At the sole discretion of The Trust, the amount of Offset Funds drawn may equal the entire amount of Offset Funds available. The Trust may request from the Project Owner less than the entire amount of the Offset Funds, but in no case shall the cumulative amount of all requests exceed the total Monetary Path Payment Requirement, as adjusted for inflation.
- 1.6 If the Project Owner fails to pay Offset Funds as requested by The Trust within ten (10) business days from the date of such request, The Trust may draw the sum of the Letter of Credit for the full or remaining amount of the Offset Funds.

- 1.7 Notwithstanding Sections 1.5 and 1.6, if the Project Owner fails to renew the Letter of Credit in a timely manner, The Trust may draw the sum of the Letter of Credit for the full or remaining amount of Offset Funds prior to the Expiration Date of the Letter of Credit pursuant to Exhibit B of the Letter of Credit.
- 1.8 Because of the need to establish a Letter of Credit with sufficient funds to cover withdrawal up to the end of a future period calculated by application of the Index, the amount of the Letter of Credit on any date may be greater than the entire amount of Offset Funds required by the monetary path, as adjusted for inflation. If there are funds available under the Letter of Credit after The Trust has withdrawn the entire amount of Offset Funds under the Monetary Path Payment Requirement, the Project Owner may terminate the Letter of Credit after The Climate Trust certifies to the Department that it has received full monetary path payments and verification by the Department that the funds remaining in the Letter of Credit are excess of the Project Owner's obligations pursuant to Section 1.

## **2. Year One True-Up Non-Base-Load Monetary Path Payment.**

- 2.1 Within the first 12 months of commercial operation of the facility, the certificate holder shall conduct a 100-hour test (Year One Test) pursuant to Condition OPR-CD-01 (Final Order Condition S.8,) or, if a Year One test is not performed, pursuant to Condition S.9, the certificate holder shall report the actual measured carbon dioxide emissions reported to the Department of Environmental Quality or the U.S. Environmental Protection Agency. Within 30 days of filing its Year One Test reports to the Council, pursuant to Condition PR-CD-01 (Final Order Condition S.8) or OPR-CD-02 (Final Order Condition S.9), the Project Owner shall re-calculate the initial monetary path payment requirement (the Year One True-Up Non-Base-Load Monetary Path Payment), as required by Condition OPR-CD-03 (Final Order Condition S.10 of the Site Certificate. The Project Owner shall submit these calculations to the Oregon Department of Energy for verification, as required by Conditions S.10 of the Site Certificate.
- 2.2 The Year One True-Up Non-Base-Load Monetary Path Payment, if any, shall be adjusted for [Index date] dollars to the date of disbursement using the Index.
- 2.3 If any Year One True-Up Non-Base-Load Monetary Path Payment exceeds the sum of the initial non-base load monetary path payment, the Project Owner shall pay the excess amount directly to The Trust within 30 days after its notification by the Department of the amount that project owner owes.
- 2.4 In no case shall the calculations under this Section 2 result in a refund to the Project Owner of any amount already paid to the trust.

## **3. Periodic Five-Year Reporting Period**

- 3.1 Each five years after beginning commercial operation, if the Project Owner has elected to calculate any excess emissions using annual average hours operation and new and clean heat rates, pursuant to Condition OPR-CD-01 (Final Order Condition S.8), the certificate holder shall report the annual average hours of operation of each generating unit within the facility during that five-year reporting period. If the Project Owner has elected to calculate any excess emissions using actual or measured carbon dioxide emissions reported to either the

Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency, pursuant to Condition OPR-CD-02 (Final Order Condition S.9), the Project Owner shall submit to the Council the carbon dioxide reporting data and net kWh generation for that five-year reporting period and shall use that data. t

- 3.2 If the Department of Energy determines that there are excess emissions for the five-year report period, in determining the excess carbon dioxide emissions that the Project Owner must offset for a five-year period, the Council shall credit the certificate holder with offsets equal to the difference between the carbon dioxide emissions allowed by the site certificate in previous periods and actual emissions, if actual emissions were lower than allowed, unless the certificate holder has elected to utilize actual or measured carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide reporting requirement. Once the Project Owner has used the credit, the Project Owner shall not use it again. The Project Owner shall pay for the excess emissions at \$1.27 per ton of carbon dioxide emissions (in 2015 dollars). The Department shall notify the certificate holder and The Climate Trust of the amount of the payment required, using the monetary path, to offset excess emissions.
- 3.3 For any Periodic Five-Year Reporting Period Monetary Path Payment, the Selection and Contracting Funds shall be equal to 10 percent of the value of any Offset Funds of the first \$500,000 ([Index year] dollars) and 4.286 percent of the value of any Offset Funds in excess of \$500,000 ([Index year] dollars).
- 3.4 The Project Owner shall pay to The Trust the specified amount of any Periodic Five-Year Reporting Period Monetary Path Payment within 30 days of its notification by the Department of the amount that the Project Owner owes.

#### **4. Undertaking by The Trust.**

- 4.1 The Trust shall use the Initial Non-Base-Load Monetary Path Payment as well as any Year One True-Up Non-Base-Load Monetary Path Payment and/or Periodic Five-Year Reporting Period Monetary Path Payments in accordance with OAR 345-024-0710.
- 4.2 With respect to the Offset Funds portions of any Initial Non-Base-Load Monetary Path Payment, Year One Non-Base-Load Monetary Path Payment, or Periodic Five-Year Reporting Period Monetary Path Payments, The Trust shall spend at least 80 percent of the Offset Funds for contracts to implement offsets, and may use up to 20 percent of the Offset Funds for monitoring, evaluation, administration, and enforcement of contracts to implement offsets. The Trust shall spend Offset Funds solely for contracts to implement offsets or for monitoring, evaluation, administration, and enforcement of contracts to implement offsets.
- 4.3 The Selection and Contracting Funds portions of any Initial Non-Base-Load Monetary Path Payment, Year One Non-Base-Load Monetary Path Payment, and Periodic Five-Year Reporting Period Monetary Path Payments shall compensate The Trust for its costs of selecting offsets and contracting for the implementation of offsets and administrative costs related to operating The Trust as a qualified organization.

- 4.4 The Trust shall use its best efforts to remain a qualified organization, as defined in OAR 345-001-0010(45), until The Trust has used all funds received from the Project Owner.

**5. Limited Obligation of Project Owner.**

The Trust acknowledges that, pursuant to OAR 345-024-0710(3), the Project Owner and the Project shall have no obligation with regard to offsets for the Project other than to make available to The Trust the total amount of the monetary path payments.

**6. Limited Participation by Project Owner in The Trust Decision Making.**

The Project Owner may appoint one nonvoting member to the Board of Directors of The Trust for a term lasting until The Trust has completed the contracting for the offset funds provided by the Project Owner for The Facility. The Project Owner shall have no approval rights over The Trust's offset contracts, disbursement of Offset Funds, or other day-to-day operations of The Trust.

**7. Project Owner Agreement to Indemnify and Hold The Trust Harmless.**

The Project Owner agrees to defend, hold harmless and indemnify The Trust from and against any and all claims, costs, liabilities, and expenses of any nature whatsoever, including reasonable attorneys' fees, resulting from or arising out of any failure by the Project Owner to make any payments required by this Agreement, or to establish and maintain the Letter of Credit described in Section 1.4 in a timely manner; PROVIDED, that the maximum amount of the Project Owner's liability to The Trust for claims, costs, liabilities and expenses, including attorneys' fees, arising out of the failure to make a payment or establish the Letter of Credit required by this Agreement in a timely manner shall not exceed twice the differential between the amount payable to The Trust on a particular date and the amount actually paid or made available to The Trust on or before that date. FURTHER PROVIDED, The Trust must make reasonable efforts to mitigate any losses, liabilities or expenses for which it seeks indemnification from the Project Owner.

**8. General Provisions.**

- 8.1 Governing Law: This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon. Any ambiguity that may arise under this Agreement shall be given a fair and reasonable construction in accordance with the intention of the parties and without regard to which party caused or is deemed to have caused such ambiguity to exist.
- 8.2 Amendments and Waivers: This Agreement may not be modified, supplemented, altered or amended, or any provision hereof or rights hereunder deemed be waived, except by an instrument in writing designated as an amendment of or waiver under this Agreement and signed by both parties. The waiver of any particular breach or default hereunder shall not constitute a waiver of any other breach or default. Failure or delay by any party to enforce any provision of this Agreement shall not in any way be

construed as a waiver of such provision, nor shall it prevent such party from thereafter enforcing each and every provision of this Agreement.

- 8.3 Entire Agreement: This Agreement constitutes the entire agreement between the parties hereto as to the matters set forth herein, and all prior proposals, commitments, understandings and agreements, whether oral or in writing, as to such matters are superseded by this Agreement.
- 8.4 Assignment: The rights of the Project Owner under this Agreement may be assumed by any entity that acquires an ownership interest in the Project. Upon such assumption, such entity shall be deemed to be a party to this Agreement. The Trust may not assign this Agreement without the prior consent of the Project Owner and Council; provided that, if the proposed assignee is a “qualified organization” as defined in OAR 345-001-0010(45), the Project Owner shall not unreasonably withhold such consent.
- 8.5 Third-Party Beneficiaries: Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies on any persons other than the parties hereto and their respective authorized successors and permitted assigns.

IN WITNESS WHEREOF, the parties have caused this Memorandum of Understanding to be executed by their respective duly authorized representatives, as of the day and year first above written.

PERENNIAL WIND CHASER STATION , LLC

THE OREGON CLIMATE TRUST

By:

By:

Name:

Name:

Title:

Title:

Date:

Date:

APPENDIX A: CALCULATION OF INITIAL BASE-LOAD AND POWER AUGMENTATION MONETARY  
PATH PAYMENT REQUIREMENT [NOT INCLUDED IN SITE CERTIFICATE]

APPENDIX B: STANDBY LETTER OF CREDIT

**APPENDIX B TO MEMORANDUM OF UNDERSTANDING**

[FORM OF CLIMATE TRUST LETTER OF CREDIT]

**IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER [Insert number]**

[Date]

THE OREGON CLIMATE TRUST

516 SE Morrison, Suite 300

Portland, OR 97214-2343

Ladies and Gentlemen:

At the request and for the account of Perennial-WindChaser, LLC (PER), address 300 Madison Avenue,, New York, NY 10017 , for its Perennial Wind Chaser Station , we, [INSERT BANK NAME HERE], hereby establish effective immediately, in favor of you, THE CLIMATE TRUST ("Beneficiary"), this Irrevocable Standby Letter of Credit Number [Insert number ] (the "Letter of Credit") in the amount of USD \_\_\_\_\_ (as such amount may be reduced from time to time by partial draws hereunder, the "Stated Amount").

This Letter of Credit is being issued in connection with Site Certificate for the Perennial Wind Chaser Station with the STATE OF OREGON, dated \_\_\_\_\_ as may be amended from time to time.

This Letter of Credit is issued, presentable, and payable at our offices at [Drawing address], and expires with our close of business on \_\_\_\_\_ (the present or any future expiration date is referred to herein as the "Expiration Date").

It is a condition of this Letter of Credit that it shall be automatically extended without amendment for successive one (1) year periods from the present or any future Expiration Date hereof, unless we provide you with written notice of our election not to renew this Letter of Credit at least sixty (60) days prior to any such Expiration Date. For the purposes hereof, "Business Day" shall mean any day on which commercial banks are not authorized or required to close in \_\_\_\_\_. Subject to the terms and conditions herein, funds under this Letter of Credit are available at sight against your draft drawn on us bearing upon its face the clause "Drawn under \_\_\_\_\_ and accompanied by the following documents:

1. The original of this Letter of Credit and all subsequent amendments, if any; and
2. Your sight draft drawn on us; and
3. A dated draw certificate purportedly signed by an authorized officer of the Beneficiary and on Beneficiary's letterhead in the form of attached Exhibits A or B to this Letter of Credit (incorporated herein by reference and made an integral part hereof).

Partial and multiple draws are permitted under this Letter of Credit, provided that the Stated Amount of this Letter of Credit shall be permanently reduced by the amount of each such draw. This Letter of Credit may not be transferred or any of the rights hereunder assigned. Any purported transfer or assignment shall be void and of no force or effect. \_\_\_\_\_ agrees that a draft drawn and

presented in conformity with the terms of this Letter of Credit will be duly honored upon presentation. If a draft made by Beneficiary does not conform to the terms and conditions of this Letter of Credit, we will give Beneficiary prompt notice that the demand for payment will not be effected. Such notice will include a statement of reasons for the denial. Upon being notified that the demand for payment was not effected in conformity with this Letter of Credit, Beneficiary may attempt to correct the nonconforming demand; provided, however, that any draft or document prescribed to correct such nonconforming demand must be provided on or prior to the Expiration Date.

This Letter of Credit sets forth in full our undertaking and such undertaking shall not in any way be modified, amended, amplified or limited by reference to any documents, instruments or agreements referred to herein, except only the exhibits referred to hereby and any such reference shall not be deemed to incorporate by reference any document, instrument or agreement except for such exhibits

This Letter of Credit shall be governed by the Uniform Customs and Practice for Documentary Credits, 2007 Revision, International Chamber of Commerce Publication No. 600 (the "UCP"). As to matters not covered by the UCP, this Letter of Credit shall be governed by the laws of the State of Oregon without regard to the principles of conflicts of laws thereunder.

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**Authorized Signature**

[THE CLIMATE TRUST LETTERHEAD]

**DRAW CERTIFICATE**

[DATE]

[To Issuing Bank]

Drawn under Irrevocable Standby Letter of Credit Number \_\_\_\_\_

Any capitalized term used herein shall have the meaning defined for that term by the Letter of Credit.

The undersigned, the duly elected and acting \_\_\_\_\_ of the Beneficiary, hereby certifies as follows:

1. Perennial WindChaser, LLC has failed to pay Offset Funds to The Climate Trust for the Monetary Path Payment Requirements described in the Site Certificate for the Perennial Wind Chaser Station , as amended from time to time, (the "Site Certificate") within the time provided in the Memorandum of Understanding between The Climate Trust and Perennial-WindChaser, LLC for the Carbon Dioxide Standard Implementation of the Monetary Path Payment Requirement With A Standby Letter Of Credit ("Memorandum of Understanding").
2. As a result of said failure to pay, the Beneficiary is entitled pursuant to the provisions of the Site Certificate and the Memorandum of Understanding to make demand under the Letter of Credit in the amount of \$\_\_\_\_\_.
3. The undersigned has concurrently presented to you its sight draft drawn in the amount specified in Paragraph 2 above, which amount does not exceed the lesser of (a) the amount the Beneficiary is entitled to draw pursuant to the provisions of the Site Certificate and Memorandum of Understanding, and (b) the Stated Amount as of the date hereof. The date of the sight draft is the date of this Certificate, which is not later than the Expiration Date.
4. Funds paid pursuant to the provisions of the Letter of Credit shall be wire transferred to the Beneficiary in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, the Beneficiary has executed and delivered this certificate as of [Date].

THE CLIMATE TRUST as Beneficiary

By: \_\_\_\_\_

Title: \_\_\_\_\_



**EXHIBIT B**  
**[THE CLIMATE TRUST LETTERHEAD]**  
**DRAW CERTIFICATE**

[Date]

[Insert Bank Information]

Attention: Letter of Credit Manager

Drawn under Irrevocable Standby Letter of Credit Number \_\_\_\_\_

Ladies and Gentlemen:

Any capitalized term used herein shall have the meaning defined for that term by the Letter of Credit.

The undersigned, the duly elected an acting \_\_\_\_\_ of the Beneficiary, hereby certifies as follows:

1. [Bank] as heretofore provided written notice to the Beneficiary of the Bank's intent not to renew the Letter of Credit following the present Expiration Date thereof.

2. Perennial-WindChaser, LLC is required to deliver to the Beneficiary and keep in effect, a letter of credit that satisfies the requirements of Condition S.8 of the Site Certificate for the Perennial Wind Chaser Station, as amended from time to time (the "Site Certificate").

3. Neither Perennial-WindChaser, LLC nor any person acting on its behalf has, at least twenty (20) days prior to the present Expiration Date of the Letter of Credit, delivered to Beneficiary a letter of credit that satisfies the requirements of Condition S.6 of the Site Certificate.

4. As a result of said failure to deliver a replacement letter of credit at least 20 days prior to the present Expiration Date of the Letter of Credit, the Beneficiary is entitled pursuant to the provisions of the Site Certificate and the Memorandum of Understanding to make demand under the Letter of Credit in the amount of \$ \_\_\_\_\_.

5. The undersigned has concurrently presented to you its sight draft drawn in the amount specified in Paragraph 4 above, which amount does not exceed the lesser of (a) the amount the Beneficiary is entitled to draw pursuant to the provisions of the Site Certificate and the Memorandum of Understanding, and (b) the Stated Amount as of the date hereof. The date of the sight draft is the date of this Certificate, which is not later than the Expiration Date.

6. Funds paid pursuant to the provisions of the Letter of Credit shall be wire transferred to the Beneficiary in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, the Beneficiary has executed and delivered this certificate as of the [Date].

THE CLIMATE TRUST as Beneficiary

By: \_\_\_\_\_

Title: \_\_\_\_\_

Appendix F  
Perennial Wind Chaser Station  
Comment Index

DateOfDoc	From: Last Name	From: First Name	From: Organization	Type	Issue(s) Raised	Consideration in Proposed Order
5/7/2015	Smith	Byron	City of Hermiston & Port of Umatilla	Written	Facility's use and reliance upon Port of Umatilla water right and the necessary infrastructure upgrades in order to provide water to the facility	Section IV.B.: Organizational Expertise and Section IV.R.: Ground Water
5/7/2015	Harrison	Glenn	N/A	Written	Facility's impact on oregon trails	Section IV.F.: Protected Areas and Section IV.L.: Recreation Standard
5/14/2015	Murdock	George	Umatilla County Board of Commissioners	Written	Requested that each specific land use permit to be issued to be identified within a condition; requested the applicant enter into a development agreement with the County to address road improvements, including icing and fogging as a result of facility operation; requested clarification of the Council's enforcement of the noise standard	Section IV.E.: Land Use; Section IV.M.: Public Services; and Section IV.P.: Noise
5/14/2015	Pedro	Lawrence	N/A	Oral	Impact of reconducted transmission line on agriculture pivots	Section IV.O.: Siting Standards for Transmisison Lines
5/14/2015	Echeverria	Dixie	ELH, LLC	Oral	Placement of proposed natural gas line and potential icing of roadways associated with the facility's plume during operation	Section II.B; Section IV.M.: Public Services
5/14/2015	Little	Chuck	Pendleton Building Construction Trades Council	Oral	In support of the facility	General Suport for the Facility, not addressed in the Proposed Order
5/14/2015	Gilbert	Irene	N/A	Oral	Impact of the facility's plume on military airspace and drones	Section IV.M.: Public Services
5/14/2015	Mabbott	Tamra	On behalf of Umatilla County Board of Commissioners	Oral	Summarized County's sumitted written comments (above)	Section IV.E.: Land Use; Section IV.M.: Public Services; and Section IV.P.: Noise