

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

In the Matter of the Application for Site Certificate)	
for the Nolin Hills Wind Power Project)	FINAL ORDER ON APPLICATION
)	FOR SITE CERTIFICATE
)	

July 19, 2023 (Approved)
August 31, 2023 (Issued)

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ACRONYMS AND ABBREVIATIONS

AB	Agri-Business Zone
AC	Alternating Current
ACEC	Area of Critical Environmental Concern
AGL	Above Ground Level
APLIC	Avian Power Line Interaction Committee
Applicant	Nolin Hills Wind, LLC
ASA	Ambulance Service Area
ASC	Application for Site Certificate for the Nolin Hills Wind Power Project
ASCE	American Society of Civil Engineering
AUC	Alberta Utilities Commission
BESS	Battery Energy Storage System
BGEPA	Bold and Golden Eagle Protection Act
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
BPA	Bonneville Power Administration
CadnaA	DataKustic GmbH's Computer-Aided Noise Abatement program
Capital Power	Capital Power Corporation
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
Council	Oregon Energy Facility Siting Council
Corona3	Corona and Field Effects Program Version 3
CPUSHI	Capital Power US Holdings Inc.
CR	County Road
CRP	Conservation Reserve Program
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CWA	Clean Water Act
cy	Cubic Yards
dBA	Decibel A Scale
DC	Direct Current
Department	Oregon Department of Energy
DEQ	Oregon Department of Environmental Quality
DLCD	Oregon Department of Land and Conservation
DOGAMI	Oregon Department of Geology and Mineral Industries
DPO	Draft Proposed Order
DSL	Oregon Department of State Lands
EFSC	Oregon Energy Facility Siting Council
EPA	United States Environmental Protection Agency
EPRI	Electric Power Research Institute
ESCP	Erosion and Sediment Control Plan
EFU	Exclusive Farm Use
FAA	Federal Aviation Administration
Facility	Nolin Hills Wind Power Project
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
g	gravity
GE	General Electric

GPS	Global Positioning System
GSU	Generator Step-up
GW	Gigawatt
HARC	Hermiston Agricultural Research Center
HMA	Habitat Mitigation Area
HMP	Habitat Mitigation Plan
LCDC	Land Conservation and Development Commission
LI	Light Industrial Zone
Lidar	Light Detection and Ranging
LOS	Level of Service
LUBA	Oregon Land Use Board of Appeals
MET	Meteorological Evaluation Tower
Mgal	Million Gallons
MIDP	Monitoring and Inadvertent Discovery Plan
MTBH	Maximum Blade Tip Height
MVA	Megavolt Ampere
MW	Megawatt(s)
NESC	National Electrical Safety Code
NMT	Nacelle-Mounted Transformer
NOAA	National Oceanic Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NRCS	Natural Resources Conservation Service
NSR	Noise Sensitive Receptor
NWC	Northwest Wildlife Consultants
NWI	National Wetlands Inventory
O&M	Operations and Maintenance Building
OAR	Oregon Administrative Rule
OCTA	Oregon-California Trails Association
ODA	Oregon Department of Agriculture
ODA	Oregon Department of Aviation
ODEQ	Oregon Department of Environmental Quality
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
OESA	Oregon Endangered Species Act
OHWL	Ordinary High Water Level
ONHT	Oregon National Historic Trail
OPRD	Oregon Parks and Recreation Department
OR-320	Oregon Trail Road
ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statutes
OSP	Oregon State Police
OSSC	Oregon Structural Specialty Code
OWRD	Oregon Water Resources Department

pASC	Preliminary Application for Site Certificate
PGA	Peak Ground Acceleration
PMT	Pad Mounted Transformer
	Proposed Order
PO	Photo Voltaic
PV	Recommendations and Recognized and Generally Accepted Good
RAGAGEP	Engineering Practices
	Request for Additional Information
RAI	
RBC	Royal Bank of Canada
RFPD	Rural Fire Protection District
ROW	Right of Way
RPS	Rangeland Program Summary
RTC	Rural Tourist Commercial Zone
RV	Recreational Vehicle
SAG	Special Advisory Group
SAT	Single-Axis Tracker
SCADA	Supervisory Control Data Acquisition
SGHAT	Solar Glare Hazard Analysis Tool
SHPO	State Historic Preservation Office
SIP	Strategic Investment Program
SPCC	Spill Prevention, Control and Countermeasure
STIP	Statewide Transportation Improvement Program
SWCA	SWCA, Inc.
T&E	Threatened and Endangered
TPR	Transportation Planning Rule
TRP	Tactical Response Procedures
TSP	Transportation System Plan
TUS	Traditional Use Study
UC	Unincorporated Community
UCCP	Umatilla County Comprehensive Plan
UCDC	Umatilla County Development Ordinance or Code
UDFD	Umatilla County Fire District
UEC	Umatilla Electric Cooperative
UGB	Urban Growth Boundary
UPS	Uninterrupted Power Supply
US-395	United States Highway 395
USACE	United States Army Corp of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
WGS	Washington Ground Squirrel
WOS	Waters of the State
ZVI	Zone of Visual Impacts

I. INTRODUCTION

This Final Order approves the Application for Site Certificate (ASC) for the construction and operation of the Nolin Hills Wind Power Project (facility).

The applicant is Nolin Hills Wind, LLC, a wholly-owned subsidiary of Element Power US, LLC. The applicant's parent company is Capital Power Corporation. The approved energy facility includes wind and solar energy generating components with a nominal generating capacity of approximately 600 megawatts (MW) (approximately 340 MW from wind and 260 MW from solar), to be located within the approved site boundary, located near the Town of Nolin in Umatilla County, Oregon.

The facility qualifies as an "energy facility" under the definition in ORS 469.300(11)(a)(D)(i) and (ii) and -(J) because it includes solar photovoltaic energy generation components to be located on more than 160 acres of high-value farmland as defined in ORS 195.300 and more than 1,280 acres of land that is predominately cultivated; and includes 50 megawatts (MW) or more of average electric generating capacity (150 MW nominal capacity) of wind energy generation components. Therefore, the facility must receive EFSC approval of a site certificate to construct and operate the facility within the approved site.¹

II. PROCEDURAL HISTORY

II.A. Notice of Intent

On September 11, 2017, the Department received a Notice of Intent (NOI) to file an ASC for the facility. At the time of the 2017 NOI filing, the facility was proposed as a 350 MW wind facility.² The Department issued the NOI Public Notice on October 5, 2017 and published the NOI Public Notice in the East Oregonian newspaper on October 7, 2017.³ The Department distributed the NOI to state, tribal and local reviewing agencies on October 5, 2017 and requested comments on the NOI no later than November 6, 2017.^{4, 5} Comments on the NOI were received by the Department from 7 state, local and tribal reviewing agencies (Oregon Department of State Lands, Department of Land Conservation and Development, City of Hermiston, Oregon Department of Fish and Wildlife, Nez Perce, Umatilla County of Board of Commissioners, and Oregon State Historic Preservation Office; and three public comments.⁶

¹ ORS 469.320

² NHWNOIDoc1 NOI 2017-09-07.

³ NHWNOIDoc6 NOI Public Notice 2017-10-05. NHWNOIDoc6-1 NOI Public Notice Proof of Ad 2017-10-07.

⁴ NHWNOIDoc2 Reviewing Agency NOI Review Request Memos 2017-10-05.

⁵ Reviewing agencies as defined in OAR 345-001-0010(51).

⁶ NHWNOIDoc3 and Doc4. Reviewing Agency and Public Comments on the NOI. 2021-10-06 through 2017-11-06.

1 Pursuant to ORS 469.480, on October 19, 2017, the Council appointed the Umatilla County
2 Board of Commissioners as the Special Advisory Group (SAG) for the proposed facility.^{7,8} As a
3 SAG, the Umatilla County Board of Commissioners is tasked with recommending “applicable
4 substantive criteria” from the acknowledged comprehensive plan and land use regulations that
5 are required by the statewide planning goals and in effect on the data the preliminary ASC is
6 submitted, and any Land Conservation and Development Commission administrative rules and
7 goals and any land use statutes that apply directly to the facility under ORS 197.646.^{9,10}

8
9 Pursuant to ORS 469.370(10) and OAR 345-015-0160, the Department issued a Project Order on
10 January 10, 2018, which specified the state statutes and administrative rules, and local, state,
11 and tribal laws, regulations, ordinances and other requirements applicable to the siting of the
12 proposed facility.¹¹ For issuance, the Project Order was posted to the Department’s project
13 webpage and provided to the applicant. At the request of the applicant, an NOI extension order
14 was issued on August 23, 2019.¹²

15 16 **II.B. Application for Site Certificate**

17
18 The Department received the initial Preliminary Application for Site Certificate (pASC) for the
19 proposed facility on February 27, 2020. At the time of the February 27, 2020 pASC, the facility
20 was proposed as a 350 MW wind facility, as represented in the September 11, 2017 NOI. The
21 Department distributed the pASC to reviewing agencies on March 2, 2020 and requested
22 comments on the pASC no later than April 1, 2020. Additionally, an announcement was posted
23 on the Department’s website, notifying the public that the pASC had been received by the
24 Department. Comments on the pASC were received from 8 state agencies, 1 local government,
25 the SAG, 2 Tribal Governments and 1 federal agency. All comments were provided by the
26 Department to the applicant for their review and consideration during the pASC completeness
27 review.

28
29 Pursuant to OAR 345-015-0190(1), on April 27, 2020 the Department determined the pASC to
30 be incomplete and issued a Request for Additional Information (RAI) to the applicant. The
31 applicant responded on June 16 and August 28, 2020 with additional facts, evidence and
32 analysis.¹³

⁷ NHWNOIDoc5 Order Appointing Special Advisory Group 2017-10-19.

⁸ ORS 469.480(1) states, “The Energy Facility Siting Council shall designate as a special advisory group the governing body of any local government within whose jurisdiction the facility is proposed to be located.

⁹ ORS 469.504(1)(b)(B)

¹⁰ Per OAR 345-022-0030(3), “applicable substantive criteria” are “criteria from the affected local government’s acknowledged comprehensive plan *and* land use ordinances that are *required by the statewide planning goals . . .*” (emphasis added). Thus, to constitute applicable substantive criteria, the criteria must typically be in both a comprehensive plan *and* land use ordinances *and* be required by a statewide planning goal.

¹¹ NHWNOIDoc7 Project Order 2018-01-10.

¹² NHWNOIDoc1-1 Order Granting an Extension to NOI 2019-08-23.

¹³ NHWAPPDc4 through 4-4. DPO Comments Applicant. 2020-06-17; 2020-08-28.

1 On November 6, 2020, the applicant submitted a revised pASC including a substantive change
2 to the capacity and generation components of the proposed facility from a 350 MW wind
3 facility to a 600 MW wind and solar facility. The Department posted the revised pASC to its
4 project webpage and notified reviewing agencies of the opportunity to review and comment on
5 the changes. The Department issued an Amended Project Order, based on the November 6,
6 2020 revised pASC, on August 2, 2021.

7
8 The Department issued additional RAIs on December 20, 2020, February 22 and July 27, 2021
9 which the applicant responded to on April 23, June 24, September 17, October 7 and November
10 17, 2021. The Department issued a policy memo and RAIs on December 6, 2021, specific to the
11 applicant's request for an exception to the statewide policy embodied in Goal 3, *Agricultural*
12 *Lands* for the proposed solar photovoltaic energy generation components, as presented in pASC
13 Exhibit K. In response, the applicant provided additional facts and analysis, including two
14 landowner letters, on December 6, 2021, January 14 and 27, 2022.

15
16 On January 28, 2022, following review of the responses, revised pASC Exhibits and
17 supplemental facts and evidence submitted by the applicant in response to the Department's
18 RAIs and agency comments throughout the pASC review process, the Department determined
19 the ASC to be complete and notified the applicant.¹⁴ The applicant filed a complete ASC on
20 January 31, 2022.¹⁵

21
22 Public notice of the complete ASC was issued on February 3, 2022, with notice published in the
23 East Oregonian on February 8, 2022. Pursuant to OAR 345-015-0200, the Department
24 distributed electronic copies of the complete ASC to reviewing agencies, along with a request
25 for agency reports on the complete ASC by February 18, 2022. The Department received
26 comments from 2 state and 1 local government agencies. In addition, the Department held a
27 virtual public information meeting on the complete ASC on February 16, 2022 via Webex.¹⁶

28 29 **II.C. Council Review Process**

30 31 *Draft Proposed Order*

32
33 On April 19, 2022, the Department issued Public Notice of issuance and comment period on the
34 Draft Proposed Order (DPO) and of a public hearing on the DPO. The Public Notice was
35 distributed to all persons on the Council's general mailing list, to the special list established for
36 the proposed facility, to an updated list of property owners supplied by the applicant,¹⁷ and to a
37 list of reviewing agencies as defined in OAR 345-001-0010(52). The Department also published

¹⁴ NHWAPDoc1 ASC Determination of Complete Application Letter_2022-01-28.

¹⁵ Pursuant to OAR 345-015-0190(5), an ASC is complete when the Department finds that an applicant has submitted information adequate for the Council to make findings or impose conditions on all applicable Council standards.

¹⁶ Informational meeting on the complete ASC was conducted in accordance with OAR 345-015-0190(8)(d).

¹⁷ NHWAPDoc2-5 ASC Exhibit F. Property Owners 2022-02-03. As presented in ASC Exhibit F, property owner information was obtained by the applicant from Umatilla County on January 31, 2022.

1 the Public Notice in the East Oregonian on April 19, 2022, a newspaper of general circulation in
2 the area of the proposed facility. This information was also posted on the ODOE facility
3 webpage on April 19, 2022.

4
5 The comment period extended from April 19, 2022 – May 26, 2022 (public), and through June
6 24, 2022 for the applicant to respond to issues raised in comments received. The public hearing
7 on the DPO was both an in-person and virtual/remote hearing and was held at the Red Lion
8 Hotel in Pendleton, Oregon at 5:30 pm on Thursday May 26, 2022.¹⁸ Under OAR 345-015-
9 0230(1), at the June 24, 2022 EFSC meeting, following the close of the record of the DPO public
10 hearing, Council reviewed the DPO, comments received and the applicant’s responses to DPO
11 comments. All comments received on the record of the DPO and applicant responses are
12 available on the project webpage.

13
14 On the record of the DPO public hearing, testimony and written comments were received from
15 the applicant and participating landowners, 11 members of the public, the Special Advisory
16 Group (SAG) (Umatilla County Planning Director on behalf of the Board of Commissioners) and
17 members of the Council. Issues raised in DPO comments are summarized below and
18 incorporated into the findings of fact in Section IV.B *Organizational Expertise*, Section IV.E. *Land*
19 *Use*, and Section IV.G. *Retirement and Financial Assurance* of this order. Attachment B-2 to this
20 order includes a DPO comment index and copies of all comments received.

¹⁸ The public hearing was held within the affected area of the proposed facility, in accordance with ORS 469.370(2).

Table 1: Summary of Comments Received on the Record of the DPO

Date Received	Commenter Name	Organization	Comment Scope/Topic
4/27/22	Samuel J. Ramos	Public; Property owner	Does not support the project, because as represented in the site boundary map, would cross two tax lots, his and the Margaret West/West Family Trust.
5/24/22; 5/26/22; 6/15/22; 6/24/22	Matt Martin, Tim McMahan, Steve Corey	Applicant, Capital Power Corporation	Requests for consideration of all proposed facts and analysis included in ASC Exhibit K related to the Department's evaluation of the Goal 3 exception request; expresses disagreement with Department applied contingencies to decommissioning estimate. Provides information from Exhibit K (re: goal exception). Provides letter from VP affirming Capital Power is financially responsible and supports development of the project.
5/26/22	Robert Waldher	Director, Umatilla County Department of Land Use Planning (SAG)	Expresses disagreement with Department's interpretation of applicability of 2-mile setback for EFSC jurisdictional facility; and, requests that EFSC include in a condition a requirement that developer obtain conditional use permit.
5/26/22	Council members (K. Howe; H. Jenkins; C. Condon)	EFSC: Vice Chair and Member	Expresses dissatisfaction over whether reasons provided for Goal 3 exception request are specific to the site under review. Requests additional facts/evidence to support conclusion of law for Organizational Expertise standard.
5/26/22	Dixie Echeverria	Public; ELH LLC	Describes that UEC transmission line location/route would negatively impact her farming operation. Asks that the transmission line avoid any property owned by ELH, LLC; requests for utilization of single pole for minimum space requirements of a 230 kV transmission line, anywhere near ELH, LLC property or adjacent properties.
5/26/22	Scott West	Public; Elron/Ramos Ranches	References letter from Ramos and states that they are in discussions with applicant – not resolved.

Table 1: Summary of Comments Received on the Record of the DPO

Date Received	Commenter Name	Organization	Comment Scope/Topic
5/26/22	Art Pryor	Public	Support for the project is contingent upon not modifying/deviating from the proposed transmission line route.
5/26/22	Jeff Grant	Public; LIUNA	Supports the project, and the work opportunities (including careers and health & retirement benefits) it would provide.
5/26/22	Chuck Little	Public	Supports project
5/26/22	James Peters	Public; LIUNA	
5/26/22	Jodi Parker	Public; LIUNA	
5/26/22	Jontae Clardy	Public; LIUNA	
5/25/22	Zack Culver	Laborer's International Union of North America (LIUNA) Local 737	
5/26/22	Eric Ansen	Public	

1
2

Council's review of the DPO and issues raised on the record of the DPO are summarized below. The Proposed Order incorporated substantiated recommended facts and analysis, as described below.

Organizational Expertise

At the June 24, 2022 meeting, Council reviewed the DPO, issues raised in comments received, and the applicant's responses to these issues. A Council member had raised on the record of the DPO an issue regarding the Organizational Expertise standard, questioning the reliability of Council relying on the applicant's parent company, Capital Power Corporation, for financial assurance to develop, construct, operate and retire the proposed facility – when it was the applicant that submitted the ASC and there was no guarantee or otherwise from the parent company acknowledging the representations in the ASC and the applicant's heavy reliance on the parent company's financial stability to meet the standard.¹⁹

In response to these comments/concerns, the applicant's representative, Matt Martin, described that:

- Capital Power Corporation, as the parent company to the LLC, is the entity that will fund the project and that Capital Power Corporation supports the project.

He also explained that Capital Power Corporation:

- has been a corporation since 1896
- is a publicly traded company on the Toronto Stock Exchange, with shareholders and over 870 employees in Canada and the US
- has a large balance sheet
- company has a Standard & Poor (or S&P) "investment rating" which is only given to companies considered financially solid – the investment rating is BBB - (which is the lowest grade before considered higher risk, but nonetheless it is a rating that demonstrates of level of financial stability²⁰

The applicant also submitted a "firm statement", dated June 24, 2022, from Capital Power Corporation's Senior Vice President and Chief Legal, Development and Commercial Officer Christopher Kopecky that Capital Power "stands behind" the project and has "committed to providing the financial assurance outlined in Exhibit M of the Application and the human capital and expertise outlined in Exhibit D...". The statement also affirmed that "Capital Power has the financial wherewithal and expertise to develop, construct, own and operate the Project."

¹⁹ NHWAPDoc5-2 DPO Public Hearing Transcript Complete Combined 2022-05-26. Testimony of Councilmember Condon.

²⁰ NHWAPDoc5-2 DPO Public Hearing Transcript Complete Combined 2022-05-26. Testimony of Matt Martin. NHWAPDoc4-1 DPO Comments Applicant Powerpoint 2022-05-26.

Following review of the above facts and evidence, Council expressed concern that the “firm statement” omitted reference to Capital Power’s ability to support the approximately \$30 million retirement phase of the proposed facility and was not legally binding or enforceable. Council requested that the Department draft a condition to address these concerns. The condition is presented below, which the Council adopted:

Organizational Expertise Condition 1 (PRE): Prior to construction, the certificate holder shall submit to the Department a guarantee signed by its parent company guaranteeing payment and performance of the certificate holder’s obligations under the site certificate using the form:

- a. Provided in Final Order on ASC Attachment F; or
- b. Substantially similar to the Final Order on ASC Attachment F, if approved by the Department in consultation with the Department’s legal counsel at the Oregon Department of Justice.

Land Use

At the June 24, 2022 meeting, Council reviewed the DPO, issues raised in comments received, and the applicant’s responses to these issues. Land Use issues were raised on the record of the DPO by the applicant and Council members, specific to the Department’s evaluation of the “reasons” exception request. Land use issues were also raised by Umatilla County Planning Director, on behalf of the Umatilla Board of County Commissioners as the appointed Special Advisory Group for this ASC, related to the Department’s evaluation of the 2-mile setback from wind turbines to rural residences and local land use permits. The Council’s review of these issues is summarized below.

In ASC Exhibit K, the applicant offered the following “reasons” to support the request that Council take an exception to the statewide policy embodied in Goal 3, *Preservation of Agricultural Lands*:

- Proposed facility would be consistent with Statewide Planning Goal 13
- Proposed facility would have minimal impacts to agriculture (minimal direct loss of agricultural lands; minimal impact on remaining farm operation; minimal impacts on surrounding agricultural lands)
- Proposed facility would have local economic benefits (benefits to landowners; local employment opportunities; benefits to government and agricultural sector.
- Locational dependency (lack of alternatives with less impacts to agriculture; proximity to transportation network; avoidance of irrigated agriculture)
- Minimal impacts to other environmental resources

In the DPO, the Department evaluated the facts, evidence and arguments provided in ASC Exhibit K for each of the above-referenced reasons, individually and collectively. Based on the

1 evaluation, which included the ability of the Department to substantiate the facts (e.g., could
2 the facts be validated or were they limited to applicant statements without firm commitment
3 to track or ensure follow through of the commitment) and an evaluation of whether the facts
4 could generally be applied to any potential site in the area rather than site-specific. Based on
5 this evaluation, the Department recommended that Council grant a “reasons” exception based
6 on the following two reasons:

- 7
- 8 • Proposed facility would have minimal impacts to agriculture (minimal impacts on
- 9 surrounding agricultural lands)
- 10 • Proposed facility would have local economic benefits (benefits to government and
- 11 agricultural sector).
- 12

13 *Applicant Comments*

- 14

15 In comments submitted on the record of the DPO public hearing, the applicant disagreed with
16 the Department’s approach to evaluating the reasons, and supporting facts, individually – and
17 appears to argue that all information provided in the ASC for the Goal 3 exception request must
18 be accepted holistically - and that the information, by default, provides compelling and
19 substantial evidence in support of a reasons-based exception. Applicant cites to the recent
20 Council decision on the Obsidian Solar Center and claims that, “The Obsidian analysis
21 collectively evaluated all factors together, finding support for the exception” and provides
22 excerpts from the Proposed Contested Case Order in that matter, which was then adopted by
23 Council in February 2022. The Department believes this is a misread of the Proposed Contested
24 Case Order for the Obsidian Solar Center and does not take into account the Council’s Final
25 Order.

26

27 For the Obsidian Solar Center ASC, the Hearing Officer’s Opinion expressed in the Proposed
28 Contested Case Order does reference all the reasons proposed by the applicant in the Obsidian
29 Solar Center ASC and states “the ALJ finds the ASC provides a preponderance of evidence to
30 justify an exception to Goal 3..because the Applicant has proposed reasons sufficient for
31 Council to take such an exception.” However, in the preceding paragraph, the Hearing Officer’s
32 Opinion states, “..I find that the Department’s Proposed Order determined information
33 contained in the ASC provided a sufficient basis for Council to take an exception to Goal 3.” In
34 the Proposed Order on the ASC for the Obsidian Solar Center, the Department’s evaluation and
35 approach was the same as has been applied to this Nolin Hills Wind Power Project ASC – and
36 recommended Council take an exception to the statewide planning goal embodied in Goal 3 for
37 2 of the 6 reasons proffered by the applicant. Further, in its Final Order on the ASC Council
38 maintains the Department’s approach of analyzing each of the reasons offered by the applicant
39 in support of an exception and agreed with the Department that 2 of the 6 reasons provided
40 justified a Goal 3 exception.²¹

41

42 *Council Comments; and Applicant Responses*

²¹ OSCAPPDoc1-4 Final Order on ASC of Obsidian Solar Center 2022-02-25., pp.85-87.

At the May 26, 2022 DPO hearing, Council member Jenkins and Vice Chair Howe expressed concerns that the “reasons” exception presented in the DPO represented “reasons” that were not site specific and could be applied to any site – and recommended that the applicant further evaluate whether things like topography or ability of the site to provide both wind and solar energy generation were in fact site specific considerations that warranted taking lands out of agricultural use for solar development. In response, the applicant shared its interpretation of the comments as requesting an “alternatives analysis” and again, referred to its previous reasons provided, but also highlighted key facts relevant to the “locational dependency” reason. The applicant expressed that the proposed facility site offers a unique ability to provide siting, and sharing of infrastructure, for both wind and solar technologies. Applicant described that the wind energy site was selected based on favorable interpretation of wind patterns by the developer. Applicant also noted that the site allows for a balanced generation profile between solar and wind.

During review of the DPO, Council recommended staff develop a condition for the proposed order that would ensure the “locational dependency” reason for an exception was carried through in real terms, not limited to the commitments included in the ASC. Based on review of ASC Exhibit C, the Department recommended that the “locational dependency” reason be realized by requiring development of a minimum of 50 MWs of wind energy generation components, if final facility design includes solar PV energy generation equipment. The 50 MW threshold is based on turbine locations (16) within strings in close proximity to the solar site (16 x 3 = 48).

The final order imposes the following condition:

Land Use Condition 16 (PRE): Prior to construction of solar photovoltaic energy generation components, the certificate holder shall document that turbine strings with a minimum of 50 MW generation capacity be constructed in close proximity to the proposed solar site and that the wind and solar facility components will share the northern project substation and any existing roads during construction and operation. Documentation of the combination of wind and solar energy generation components, at final design, shall be submitted to the Department or Council for review and approval, per (a) or (b) as applicable:

- a. If construction of wind energy generation components will commence within the same 12-month period as solar energy generation components, certificate holder shall submit to the Department final facility design documents and executed contracts (e.g., construction contract, Power Purchase Agreement) or other evidence that shows a minimum of 50 MW within turbine strings in close proximity to the solar site will be constructed and that the wind and solar facility components will share the northern project substation and any existing roads during construction and operation; or
- b. If commencement of wind energy generation components will occur more than 12-months after solar energy generation components, certificate holder shall submit to Council, for review at a regularly scheduled Council meeting, facility design documents and executed contracts (e.g., construction contract, Power Purchase Agreement) or

1 other evidence that demonstrates to Council's satisfaction that turbine string with a
2 minimum of 50 MW generation capacity will be constructed in close proximity to the
3 solar site and that the wind and solar facility components will share the northern project
4 substation and any existing roads during construction and operation prior to the
5 construction completion deadline.

6 7 *Umatilla County Comments*

8
9 At the June 24, 2022 meeting, Council reviewed the DPO and issues raised in comments
10 received. Issues relate to 1) the Department's interpretation of whether Council must require
11 the applicant to comply with a 2-mile setback from a wind turbine tower to a rural residence
12 established in Umatilla County Development Code (UCDC) Section 152.616 (HHH)(6)(a)(3)
13 ("Criterion (3)") and 2) whether the Department's omission of a requirement to obtain local
14 land use permits was raised on the record of the DPO by the SAG.

15
16 Umatilla County (the SAG) asserted the setback applies to the proposed facility. The SAG cited
17 to OAR 345-022-0030(3) and OAR 345-021-0050 and argued that, under these rules a county's
18 comprehensive plan and land use ordinances are considered the "applicable substantive
19 criteria" and, therefore, the Council must apply UCDC's 2-mile setback, rather than evaluating
20 the proposed facility against the statewide planning goals.²²

21
22 In the DPO, the Department recommended EFSC find the setback/Criterion (3) does not apply
23 because it is not required by Goal 3, Goal 14 nor any other statewide planning goal. Among
24 other points, the Department noted that LCDC has adopted numerous rules to implement Goal
25 3 and Goal 14 but none of those rules require specific setback distances between wind turbines
26 and rural residences. The Department, therefore, recommended Council find that while the
27 County's setback may be consistent with statewide land use planning goals, it is not "required"
28 by the statewide planning goals and therefore the applicant does not need to comply with it.

29
30 During their review of the DPO, Council concurred with the Department's analysis, as presented
31 in the DPO.

32 33 *Retirement and Financial Assurance*

34
35 At the June 24, 2022 meeting, Council reviewed the DPO and issues raised in comments
36 received. Retirement and Financial Assurance issues were raised on the record of the DPO by
37 the applicant. Applicant expressed disagreement with the project management (10%) and
38 future development contingencies (20%) applied by the Department to the applicant's
39 decommissioning estimate (gross cost). These contingencies resulted in an increase of \$6.7
40 million.

41

²² NHWAPDoc3-12 DPO SAG Comment Umatilla County 2022-05-26.

1 In the ASC, the applicant proposes ODOE contingencies based on 2 full-time employees for a 16
2 month duration (~\$530k). Because the Department chose to apply the contingencies that have
3 consistently been applied to EFSC facility decommissioning estimates, the applicant requested
4 that the Department provide a rationale based on “standard and accepted practices”. As
5 explained by staff during the Council’s review of the DPO, the contingency rates applied by the
6 Department originated from a 2005 Decommissioning Cost Estimate Guide prepared for the
7 Department by third-party, Pinnel Busch, Inc., maintained most recently in a 2011 update.

8
9 In the DPO, the Department explained that the 10% project management contingency was
10 established to cover the following tasks:

- 11 • Prep and approval of a decommissioning plan
- 12 • Obtaining legal permission to proceed with demolition
- 13 • Preparing bid documents; selecting contractors, getting contracts in place
- 14 • Managing/monitoring of decommissioning tasks including monitoring of restoration

15
16 Staff described that numerous other applicants have requested alternative contingencies,
17 including contingencies based on assumed number of Department staff (FTE) and duration.
18 Council directed staff to maintain the contingencies, as recommended in the DPO, because it
19 was standard practice and supported by the previous guidance; and, affirmed that this question
20 should be further evaluated through rulemaking or at an EFSC policy level.

21 22 *Proposed Order*

23
24 On August 4, 2022 the Department issued the proposed order, taking into consideration
25 Council comments, any comments received “on the record of the public hearing” (i.e., oral
26 testimony provided at the public hearing and written comments received by the Department
27 after the date of the notice of the public hearing and before the close of the public hearing),
28 and agency consultation.²³

29
30 In the proposed order, the Department further responded to Umatilla County’s comments
31 suggesting Council should require the applicant to comply with its setback/Criterion (3).²⁴ The
32 Department noted the SAG had not explained why the setback is required by statewide
33 planning goals. Rather, the SAG cited to OAR 345-022-0030(3) and OAR 345-021-0050 and
34 argued that, under these rules a county’s comprehensive plan and land use ordinances are
35 considered the “applicable substantive criteria” and, therefore, the Council must apply UCDC’s
36 2-mile setback, rather than evaluating the proposed facility against the statewide planning
37 goals.²⁵ The SAG also argued that a project that is not compliant with the local applicable

²³ OAR 345-015-0230(2).

²⁴ NHWAPDoc1 Proposed Order on ASC 2022-08-04 Pages 19-20 of 904.

²⁵ NHWAPDoc3-12 DPO SAG Comment Umatilla County 2022-05-26.

1 substantive criteria of the comprehensive plan and implementing ordinances cannot be
2 compliant with the statewide planning goals.²⁶

3
4 In the proposed order, the Department noted that the County appeared to be taking the
5 position that the Council is bound to apply all the criteria identified by the SAG without
6 consideration of whether the criteria are required by the statewide planning goals.²⁷ The
7 Department noted this position is not consistent with OAR 345-022-0030(3) or OAR 345-021-
8 0050(6)(b)(A) (the rules the County cited) – the former states “applicable substantive criteria”
9 are criteria from the affected local government’s acknowledged comprehensive plan and land
10 use ordinances *that are required by the statewide planning goals* and that are in effect on the
11 date the applicant submits the application” (emphasis added) while the latter similarly states
12 that when an applicant has elected to obtain a Council determination of compliance with the
13 Council’s land use standard under ORS 469.504(1)(b), each local government with land use
14 jurisdiction over the proposed facility shall include in their comments or recommendations to
15 the Department “a complete list of applicable substantive criteria from the local government’s
16 acknowledged comprehensive plan and land use ordinances *that are required by the statewide*
17 *planning goals* and that are in effect on the date the application was submitted” (emphasis
18 added). The Department further noted the County’s position is not consistent with ORS
19 469.504(5), which states the SAG shall recommend the applicable substantive criteria “under
20 section (1)(b)(A)” – *i.e.*, criteria from the local government’s comprehensive plan and land use
21 regulations that are “required” by the statewide planning goals. (Granted, ORS 469.504(5)
22 states “the council shall apply the criteria recommended by the special advisory group” but only
23 after first stating the SAG should recommend the criteria under section (1)(b)(A)). Per the
24 Department, the County’s position was not consistent with ORS 469.504(1)(b)(B) either, which
25 authorizes Council to approve a facility that does not comply with applicable substantive
26 criteria recommended by a SAG if it otherwise complies with applicable statewide planning
27 goals.

28
29 Concurrent with the issuance of the proposed order, the Department issued a notice of
30 proposed order and contested case.²⁸ The notice of proposed order and contested case was
31 issued via U.S. mail, email or both, dependent upon individual’s contact information on file,
32 pursuant to OAR 345-015-0230(3), and sent to all persons on the Council’s general mailing list,
33 the special mailing list established for the proposed facility (*i.e.* individuals that signed up to
34 receive electronic Department-related notifications via GovDelivery or ClickDimensions for this
35 facility or all EFSC projects), all persons who commented in person or in writing on the record of
36 the DPO public hearings, and the property owners listed in ASC Exhibit F.

37
38 *Contested Case Proceeding: Participation Eligibility*
39

²⁶ *Id.*

²⁷ NHWAPPD01 Proposed Order on ASC 2022-08-04 Pages 19-20 of 904.

²⁸ See ORS 469.370(4) and OAR 345-015-0014.

1 Only those persons who commented in person or in writing on the record of the DPO public
2 hearing may request to participate as a party or limited party in the contested case proceeding.
3 To raise an issue in a contested case proceeding, the issue must be within the jurisdiction of the
4 Council, and the person must have raised the issue in person or in writing on the record of the
5 public hearing, unless the Department did not follow the DPO noticing and public hearing
6 procedural requirements pursuant to ORS 469.370(2) or (3), respectively, or unless “[t]he action
7 recommended in the proposed order, including any recommended conditions of approval, differs
8 materially from that described in the draft proposed order, in which case only new issues
9 related to such differences may be raised [Emphasis added].²⁹ These provisions are further
10 described in OAR 345-015-0016.
11

12 As emphasized above, ORS 469.370(5) and OAR 345-015-0016 allow persons eligible to
13 participate in the contested case proceeding to raise new issues related to material differences
14 between the actions recommended in the proposed order and the actions recommended in the
15 DPO. The Council interprets these provisions to only apply to any differences between the DPO
16 and the proposed order that could result in a substantive change to a recommended Council
17 action, including recommended findings of compliance with a standard or applicable law, a site
18 certificate condition, or the Council’s decision to approve or deny the site certificate. The
19 Council does not consider a change to the Department’s analysis of underlying facts to be a
20 material difference subject to the provisions of ORS 469.370(5)(b) unless there is a
21 corresponding substantive change to a recommended Council action.
22

23 Contested Case on Proposed Order 24

25 On August 4, 2022, the Department issued the Proposed Order and a Public Notice of
26 Contested Case. The Department set September 6, 2022 at 5:00 p.m. Pacific Time as the filing
27 deadline for submitting petitions for party or limited party status. On August 22, 2022, Umatilla
28 County filed a petition for party status on the contested case. On September 12, 2022,
29 Administrative Law Judge (ALJ) Triana issued a Notice of Petitions for Party Status and Pre-
30 Hearing Conference (PHC) (Notice of Petitions) notifying the Department and applicant of the
31 filing of one petition for party status or limited party status filed by Attorney Wendie L
32 Kellington on behalf of Umatilla County (Petitioner). In the Notice of Petitions, ALJ Triana
33 established September 26, 2022 at 5:00 PM as the deadline for the Department, applicant and
34 petitioners to file a response to the petition. Response to petition was filed on September 26,
35 2022 by the Department. No response was filed by the applicant.
36

37 On October 5, 2022, ALJ Triana convened a telephone PHC where the petitioners were provided
38 an opportunity to: address whether they believed they satisfied the eligibility requirements for
39 party/limited party status; to clarify their personal interests in the outcome of the proceeding
40 and the issues identified in their petition; and, to address the responses to petitions filed by the
41 petitioner’s attorney Wendie L. Kellington, and the Department. At the PHC, ALJ Triana
42 provided Petitioner an opportunity to address whether it had satisfied the eligibility

²⁹ ORS 469.370(5)(b)

requirements for party/limited party status. The ALJ also provided applicant and the Department the opportunity to respond. Applicant and the Department were provided an opportunity to present arguments raised in their response to the petition.

On November 2, 2022, ALJ Triana issued an Order on Petitions for Party Status and Issues for Contested Case (Order on Party Status and Issues) granting limited party status to Umatilla County. The order found that the Petitioner raised each of the two issues with sufficient specificity to allow the Council, the Department, and applicant an opportunity to respond. In the Order on Party Status and Issues, the following issues were identified as properly raised issues to be addressed in the contested case:

- **Issue 1:** Whether the County's land use regulation UCDC 152.616(HHH)(6)(a)(3) (requiring a two-mile setback between wind turbines and rural residences on EFU-zoned land)³⁰ are "applicable substantive criteria" within the meaning of OAR 345-022-0030(3) that apply to the Project.
- **Issue 1.1:** If so, whether the Project complies with UCDC 152.616(HHH)(6)(a)(3)
- **Issue 2:** Whether the Project is required to obtain a conditional use permit from the County.

On December 15, 2022 the ALJ issued an Order on Case Management Matters and Contested Case Schedule (Case Management Order). On January 24, 2023, due to workload constraints of ALJ Triana, EFSC appointed a replacement ALJ (ALJ Webster) to manage the contested case proceeding.

On February 23, 2023, all three parties filed their Motions for Summary Determination (MSD), each seeking a favorable ruling on Issues 1, 1.1 and 2. On March 20, 2023, all parties filed their respective responses to the MSD. On April 11, 2023, all parties filed replies to the MSD responses.

In accordance with OAR 345-015-0023(4), ALJ Webster provided updates to Council on the status of the contested case proceeding on October 14, 2022, December 14, 2022 and February 15, 2023.

Proposed Contested Case Order

On May 12, 2023, ALJ Webster issued the *Consolidated Rulings on Motions for Summary Determination and Proposed Contested Case Order* (PCCO). The PCCO included findings of fact, analysis and conclusions of law which are incorporated by reference into this order. The PCCO's conclusions of law for each issue are stated below:

Issue 1: The Criterion (3) is not an applicable substantive criterion under OAR 345-022-0030(3) because it is not required by the statewide planning goals. Therefore, Criterion

³⁰ Referred to as "Criterion (3)"

(3) does not apply to the Project.³¹

Issue 1.1: The Project does not comply with Criterion (3) but otherwise complies with applicable statewide planning goals.³²

Issue 2: The Project is required to obtain a conditional use permit from the County, but pursuant to ORS 469.401(3), the County cannot require Applicant to comply with Criterion (3) as a requirement of the conditional use permit.³³

Umatilla County Exceptions to the PCCO

In response to the PCCO, on June 12, 2023 the County filed *Umatilla County's Exceptions to Proposed Contested Case Order* that identified a total of 9 exceptions:

Exception 1 - *Related to the exception to the erroneous finding of fact described in section (II)(A)(ii) immediately above, the PCCO misconstrues applicable law by shifting the burden of proof to the County. The applicant carries the burden of proof. The PCCO misconstrues applicable law by deciding that the County did not show that the UEC Cottonwood line is not a related or supporting facility. The burden of proving that fact belongs to the applicant. There is at the least a genuine issue of material fact regarding whether the Cottonwood line is a related or supporting facility. That means as a matter of law that summary determination on that issue misconstrued applicable law. OAR 137-003-0580(6)(a).*

Exception 2 - *UCDC 152.616(HHH)(6)(a)(3) ("Criterion (3)") is an "applicable substantive criterion" under ORS 469.504 and OAR 345-022-0030(3) and the PCCO erroneously asserts that it is not an "applicable substantive criterion" because it is not required by the statewide planning goals. PCCO, p. 14.*

Exception 3 - *The Proposed Facility would not pass through more than three zones, including Umatilla County's Agri-Business zone. The PCCO, p. 6, Finding of Fact #12 to the contrary is wrong and is not supported by substantial evidence. The record does not support the PCCO findings (PCCO, p. 30-31) that conclude that the UEC Cottonwood transmission line is a related or supporting facility (a "facility") to the proposed wind and solar energy facilities.*

Exception 4 - *The UEC Cottonwood Transmission Line Alternative is not a "related or supporting facility" to the proposed wind energy facility or solar energy facility and the County did cite evidence in the record establishing this fact. PCCO Finding of Fact #16*

³¹ NHWAPPDoc16 Proposed Contested Case Order 2023-05-12, Pages 23-28 of 35.

³² *Id.*

³³ NHWAPPDoc16 Proposed Contested Case Order 2023-05-12, Pages 31-32 of 35.

1 **Exception 5** - ODOE and EFSC do not have jurisdiction to review or reverse the special
2 advisory group's identification of Criterion (3) as an applicable substantive criterion.

3
4 **Exception 6** - Relatedly, the ALJ in their Order on Petitions for Party Status and Issues for
5 Contested Case Order ("Issues Order") has already decided that whether Criterion (3) is
6 an applicable substantive criterion is not within the Council's authority. There is a
7 specific seven (7)-day period of time for filing objections to the Issues Order and none
8 were filed. OAR 345-015-0016(6). That means, as a matter of law, the PCCO
9 misconstrues applicable law by deciding that Criterion (3) is not an applicable
10 substantive criterion.

11
12 **Exception 7** - The UEC Cottonwood transmission line is not a "related or supporting
13 facility" that passes through more than three zones, as a matter of law

14
15 **Exception 8** - The PPCO determination that even if Criterion (3) is an applicable
16 substantive criterion, that the Council is authorized to ignore it and approve the proposal
17 anyway under ORS 469.504(1)(b)(B) notwithstanding that the Proposed Facility does not
18 comply with Criterion (3), misconstrues applicable law.

19
20 **Exception 9** - The PCCO misconstrues applicable law in determining that MSD is
21 appropriate in favor of ODOE and the applicant. MSD is only appropriate if there are no
22 genuine issues of fact and the applicant has carried its burden to demonstrate
23 compliance with all applicable standards. Neither is the case here.

24 25 *Responses to Exceptions*

26
27 In response to the Exceptions to the PCCO filed by Umatilla County, the Department and the
28 applicant submitted responses on June 27, 2023. The applicant and the Department restated
29 positions and affirmed the PCCO findings. On July 13, 2023, Council's attorney for the contested
30 case, Assistant Attorney General Alia Miles (AAG Miles) notified the parties of an exceptions
31 hearing and potential material change hearing, following Council's review of the PCCO and
32 Proposed Order, to occur at the July 19, 2023 meeting.

33 34 *Exceptions Hearing and Council Review of Proposed Order and PCCO*

35
36 At the July 19, 2023 meeting, AAG Miles presided over the hearing, where oral argument was
37 heard by Council from Umatilla County, the Department and applicant. Council voted to adopt
38 the PCCO without changes and to reject all the exceptions filed by Umatilla County.

39 40 *Final Order*

41
42 On July 19, 2023, Council adopted the Proposed Order and PCCO and approved issuance of a
43 site certificate. The Council incorporates the May 12, 2023 PCCO, as the Contested Case Order

(CCO) adopted on July 19, 2023, herein by reference. The CCO is provided as Attachment 1 of this order.

On August 31, 2023, the Department posted to its website and provided notice to the contested case service list of the issuance of the final order. The Council's final order is subject to judicial review by the Oregon Supreme Court. Only a party to the contested case proceeding may request judicial review and the issues on appeal are limited to those raised by the parties to the contested case proceeding. A petition for judicial review must be filed with the Supreme Court within 60 days after the date of service of the Council's final order or within 30 days after the date of a petition for rehearing is denied or deemed denied.³⁴ Notice of appeal rights is presented following section V. *Final Conclusions and Order of the Council* of this order.

III. FACILITY DESCRIPTION, ACTIVITIES AND LOCATION

III.A. Facility

III.A.1. Energy Facility

The energy facility includes wind and solar energy generating components with a nominal generating capacity of approximately 600 megawatts (MW) (approximately 340 MW from wind and 260 MW from solar). A description of the energy facility and related or supporting facilities is presented below and is intended to be the description that is included in the site certificate, if granted by Council, and therefore binding on the applicant.

Wind Energy Generation Components

The wind energy generation components will include up to 112, 3.03 MW wind turbine generators.³⁵ The maximum turbine specifications and sound power level are presented in Table 2 below.

Table 2: Wind Turbine Specifications

Generating Capacity³⁶	Maximum Tower Hub Height (feet)	Maximum Rotor Diameter (feet)	Maximum Blade Tip Height (feet)¹ (above pedestal)	Minimum Blade Tip Clearance (feet)	Maximum Sound Power Level (dBA)²
3.03 MW	266	459	496	36.5	108

³⁴ ORS 469.403.

³⁵ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31.Pages 7-10 of 51.

³⁶ Table 2 is intended to represent binding requirements on the applicant; however, if there are technological changes in wind turbine specifications, such as a wind turbine with a higher generating capacity while still within the other specifications, the applicant may seek Department review of an Amendment Determination Request pursuant to OAR 345-027-0357 to verify whether the change could occur without undergoing a site certificate amendment.

Table 2: Wind Turbine Specifications

Generating Capacity³⁶	Maximum Tower Hub Height (feet)	Maximum Rotor Diameter (feet)	Maximum Blade Tip Height (feet)¹ (above pedestal)	Minimum Blade Tip Clearance (feet)	Maximum Sound Power Level (dBA)²
<p>Notes:</p> <ol style="list-style-type: none"> 1. Visual impacts from wind turbines with maximum blade tip height up to 496 feet were evaluated in ASC Exhibit R, with a supplemental analysis of turbines up to 656 feet in height (Exhibit R, Attachment R-1). 2. Includes a confidence interval k = 2 dBA. ASC Exhibit X, p.15. 					

Wind turbines will include a nacelle, blades, and a tower (see ASC Exhibit B Figure B-1). The nacelle will include a gearbox, generator, and control systems, and may include generator step up transformers, described further below. Turbine blades and tower will be designed with a lightening protection system to electrically ground the entire structure and eliminate the potential for lightening caused fires. Access to the nacelle will be via a ladder inside the wind turbine tower, accessible by a locked steel doorway at the base of the tower. The roof of the nacelle will be removable or opened from within to accommodate major maintenance activities such as gearbox replacement.

The wind turbines will be painted with a grey, white, or off-white, low-reflectivity coating to minimize reflection and contrast with the sky; this reduces the visual impact of the turbines in the skyline and helps make turbines visible to daytime pilots. Lighting on the facility will be minimal except to maintain safety standards and operational needs. Turbine exterior lighting, as required by the FAA, will consist of red flashing lights placed at the end of turbine strings and approximately every 0.5 mile within the site boundary.³⁷

Turbine Foundations

Wind turbines will be secured to a foundation, constructed of reinforced concrete, spread-footing, plate foundations, pile or caisson. Typical spread-foot foundations reach a depth of 10 feet below grade and can be as large as 80 to 85 feet in diameter (see ASC Exhibit B Figure B-2). The center of the foundation will be approximately 6 feet thick, tapering to approximately 2 feet thick at the outer edges. From the center of the footing to above ground level, turbine towers will be mounted on an 18-foot-diameter pedestal, which may be up to 24 inches above ground surface.³⁸ Depending on the pre-construction site-specific geotechnical investigation, bedrock foundations may be installed (see ASC Exhibit B Figure B-3).³⁹ Constructing bedrock foundations will involve stripping the topsoil and subsoil to the top of the bedrock then mechanically removing bedrock to the design depth of the turbine foundation. Holes will then be drilled to the rock anchor bolt design depth; the concrete pad will then be installed; and the rock anchor bolts will be placed to secure the concrete pad foundation.

³⁷ NHWAPDoc2-17 ASC Exhibit R. Scenic_2022-01-31. Page 25 of 47.

³⁸ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 13 of 51.

³⁹ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31.

ASC Exhibit B Figure B-4 illustrates that there will be an 82-foot diameter permanent footprint around each turbine, and as stated above, spread footing foundations could be up to 85-feet in diameter. This permanent footprint diameter includes the turbine foundation and any other vegetation-free or a non-combustible base area which will prevent fires in the areas directly around the turbines.

Nacelle-Mounted (NMT) and Pad-Mounted Generator Step-Up Transformers (PMT)

Wind turbines may be equipped with a nacelle-mounted transformer (NMT) or a pad mounted transformer (PMT), both of which are generator step-up (GSU) transformers that will step up power from 690 volts to 34.5 kV. Within each wind turbine nacelle, the NMT and wind turbine gearbox will contain approximately 549 gallons of mineral oil and 10 gallons of synthetic oil. The PMT will also contain approximately 549 gallons of mineral oil and 10 gallons of synthetic oil, each.⁴⁰ The NMT and PMT transformers and gearbox will be classified as “qualified oil-filled operational equipment” under the Environmental Protection Agency’s Amended Spill Prevention, Control, and Countermeasure Rule” which requires that, in lieu of using equipment designed with secondary containment, the applicant will prepare an oil spill contingency plan and develop a written commitment of manpower, equipment, and materials to quickly control and remove discharged oil; the plan must include an inspection or monitoring program for the equipment to detect a failure and/or discharge. Further, for the NMT, the floor of the nacelle will act as a pan to contain any potential spills of gearbox or hydraulic fluid.

If PMTs are selected, they will be enclosed in rectangular structure boxes approximately 8 feet by 11 feet, set on a 2-to-6 foot thick concrete pad or foundation, located adjacent to the base of the turbine tower, see ASC Exhibit B, Figure B-4 for the approximate location of the PMT at the base foundation of the turbines. The equipment will be designed and operated in accordance with federal requirements for “qualified oil-filled operational equipment” or designed with foundations that will provide secondary containment.⁴¹ The pad-mounted transformers will be protected from collisions on the ground with the installation of bollards.⁴²

Solar Photovoltaic Energy Generation Components

The facility will include approximately 260 MWs of nominal generating solar photovoltaic components, as described below.⁴³

Solar Arrays

⁴⁰ NHWAPDoc2-30 ASC Additional Information Package Exhbs B, M, O J, U, DD 2022-03-04.

⁴¹ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 13-14 of 51.

⁴² NHWAPDoc2-30 ASC Additional Information Package Exhbs B, M, O J, U, DD 2022-03-04.

⁴³ The facility description is intended to represent binding requirements on the applicant; however, if there are technological changes in solar photovoltaic energy generation components that would result in increased number of/differences in facility components/type of equipment but that would be located within the site boundary and micro-siting areas, the applicant may seek Department review of an Amendment Determination Request pursuant to OAR 345-027-0357 to verify whether the change could occur without undergoing a site certificate amendment.

Solar arrays will include modules placed on racks supported by posts, extending approximately 18 feet in height when tilted (see ASC Exhibit B Figures B-6 and B-7), and related electrical equipment. The facility will include approximately 816,812 modules, 21,495 single-axis tracker (SAT) or fixed-tilt racks and 83,080 posts.

Posts will be steel, round hollow or pile-type (i.e., H-pile, C-pile, S-pile) and set in concrete or grouted into a hole drilled into rock, depending on subsurface and soil conditions on site. Post depth may vary depending on soil conditions, but the posts are typically installed 6 to 10 feet below the surface and protrude approximately 4 to 5 feet above grade.

Modules will be placed in linear rows (strings), spaced approximately 12 to 25 feet apart. Each string will contain 27 modules and will be equipped with a pad-mounted combiner box, totaling up to 30,252 combiner boxes. From the combiner boxes, up to 2 miles of low-voltage cabling mounted to the racking system, placed in cable trays, or buried will be installed to collect and aggregate electricity from DC to AC. From the combiner boxes, electric cabling will be installed to interconnect to inverter/transformer stations, totaling up to 98 stations. Each station will include a 4,400-kilowatt inverter that consists of five integrated 880-watt individual units, for a total of 490 units.⁴⁴ Each transformer will contain 500 gallons of transformer oil. The dimensions of each inverter and transformer will be approximately 30 feet wide by 8.5 feet in height; inverters may be co-located with modules, strings or centrally located within the facility site.

The solar arrays will be located with the area will be located adjacent to related or supporting facilities including the Battery Energy Storage System (BESS), northern substation, O&M Building, and central construction yard, all enclosed by an 8-foot-tall security fence, with no barbed wire. Vegetation within the solar siting area will be managed and mowed, as needed, to reduce fuels for fire. Outdoor lighting at the solar array site will be kept to a minimum through the use of motion sensors and switches to reduce lighting to the minimum required for safety when not in use, and lighting will be directed downward and inward to prevent off-site glare.⁴⁵

III.A.2. Related or Supporting Facilities

Related or supporting facilities are presented below:

- Up to 14.6 Miles of aboveground 34.5 kV Electrical Collection System;
- Up to 144 Miles of underground 34.5 kV Electrical Collection System;
- Two Collector Substations;
- Up to 32.1 miles of 230 kV Transmission Lines (Substation Connector Line, and one of two provided Regional Grid Interconnection Line Route Options);
- 120 MW Battery Energy Storage System (BESS) (lithium-ion or flow);

⁴⁴ NHWAPPD2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 16 of 51.

⁴⁵ NHWAPPD2-17 ASC Exhibit R. Scenic_2022-01-31. Page 25 of 47.

- Up to three Meteorological (met) towers;
- Communication and Supervisory Control and Data Acquisition (SCADA) System;
- Operations and Maintenance (O&M) Building;
- Up to 80 Miles of Internal/External Access Roads;
- Up to 9.4 miles of 8-foot Chain-Link or Mesh Perimeter Fencing for Solar Micrositing; Areas and southern collector substation;
- Temporary Construction/Staging Areas.

34.5 kV Electrical Collection System/Collector Lines

For the wind energy generation components, the 34.5 kV electrical collection system will include up to 89 miles (up to 239 miles of conductor cable) of underground and up to 9.1 miles of aboveground collector lines. For the solar photovoltaic energy generation components, the 34.5 kV electrical collection system will include up to 55 miles (up to 144 miles of conductor cable) of underground and up to 5.5 miles of aboveground collector lines. Underground cable will be installed in trenches at a minimum 3 feet depth. Aboveground collector lines will be placed on 3-foot wide by 100-foot tall, wooden, pole structures. The wooden support poles will be buried up to approximately 12 feet in the ground and will be spaced approximately 150 to 300 feet apart, depending on specific site conditions.

Collector Substations

The facility includes two collector substations - a northern substation (10.5-acre site) and southern substation (5.9-acre site) (see ASC Exhibit C Figures C -4.16 and C-4.19). Each substation will be enclosed by a security wire mesh fence to prohibit unauthorized access. The southern substation will be enclosed by its own fence and the northern substation may be enclosed by its own fence or be enclosed in the fence line for the solar facility area.

Each collector substation will include a transformer, transmission line termination structures, a bus bar, circuit breakers and fuses, control systems, meters and other equipment; and will be placed on a concrete foundation and located within its own security fence. Each transformer will be 300 megavolt ampere (MVA) and will contain 14,000 gallons of transformer oil, with a design to provide secondary containment. The collector substations will each be powered by up to sixty 300-amp hour lead-acid batteries, placed in sealed containers held in a wall rack located inside the substation power control buildings.⁴⁶ The area around both substations will be graveled, with no vegetation present.⁴⁷ Outdoor lighting at the substations will be kept to a minimum through the use of motion sensors and switches to reduce lighting to the minimum required for safety when not in use, and lighting will be directed downward and inward to

⁴⁶ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 17-18 of 51.

⁴⁷ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 19-20 of 51.

prevent off-site glare.⁴⁸ Substation structures will be finished in neutral colors to blend with the surrounding landscape.

230 kV Transmission Lines

The facility includes two 230 kV transmission lines. The 230 kV transmission line will be supported by wooden H-frame or steel monopole structures, 100 to 140 feet tall, spaced on average 600 feet apart. Wooden monopole structures will help blend with the poles with the surroundings; if steel structures are selected, they will have a low-reflectivity coating to reduce visual impacts of the structures. One transmission line will interconnect the northern and southern substations, and the other transmission line will interconnect the northern substation to the electrical grid. The 230 kV transmission line that will interconnect the northern substation to the grid includes two proposed route options.

- Proposed Substation Connector Line (6.8 miles)
- Proposed Regional Grid Interconnection Line – Route Options
 - UEC Cottonwood Route (25.3 miles)
 - BPA Stanfield Route (5 miles)

Substation Connector Line

A 6.8 mile, single circuit 230-kV transmission line supported by H-frame or monopole structures (or other form as needed for specialized locations) will extend between the two proposed substations. The 230-kV substation connector line will be designed to maintain a minimum conductor-to-ground clearance of 25 feet (minimum 35 feet over national highways; varies with location per safety codes), and structures will be approximately 100 to 140 feet tall, spaced approximately 600 feet apart depending on the terrain.⁴⁹

UEC Cottonwood Route (alternative)

The proposed UEC Cottonwood route will be approximately 25.3 miles in length, of which:

- approximately 8.4 miles will be a new single-circuit 230-kV transmission line,
- approximately 9.6 miles will replace an existing 12.47-kV distribution line with a 230-kV transmission line and distribution underbuild, and
- approximately 7.3 miles will upgrade an existing 115-kV UEC transmission line to a double-circuit 230/115-kV line with 12.47-kV underbuilt distribution.

For the approximately 7.3-mile 115 kV upgrade, the existing 55- to 85-foot-tall pole 115 kV structures will be replaced with 140 foot tall, steel pole structures. The new 230 kV circuit will be strung on one side of the pole and the existing 115 kV circuit will be strung on the opposite side of the pole, on pole masts with suspension insulators. The 230 kV transmission line will be aboveground, on wooden H-frame or steel monopole structures approximately 100 to 140 feet

⁴⁸ NHWAPDoc2-17 ASC Exhibit R. Scenic_2022-01-31. Page 25 of 47.

⁴⁹ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 23-24 of 51.

1 tall. The new 230 kV structures will also include crossarms for distribution underbuild. For this
2 upgrade, applicant will be required to obtain easements, up to 100-feet, prior to construction.⁵⁰

3 4 BPA Stanfield Route (alternative)

5
6 The proposed BPA Stanfield route will be approximately 5 miles in length, of which
7 approximately 3 miles will parallel an existing 230-kV transmission line, outside of the existing
8 transmission line's right-of-way.⁵¹ The proposed BPA Stanfield route will require a new
9 overhead 230-kV transmission line that will extend from the northern Project substation to the
10 BPA Stanfield Substation.⁵² The 230 kV transmission lines will be aboveground, on wooden H-
11 frame or steel monopole structures approximately 100 to 140 feet tall. If the BPA Stanfield
12 route is selected by the applicant, a new overhead 230-kV transmission line will extend
13 approximately 4.5 miles from the northern substation to the BPA Stanfield Substation.

14 15 *Battery Energy Storage System (BESS):*

16
17 The facility will include either lithium-ion or flow batteries to store up to 120 MW of the energy
18 generated by the solar array, located near the O&M Building and northern substation on the
19 western side of the solar array, or in distributed units throughout the solar array. Two battery
20 options may be used: AC- or DC-coupled lithium-ion batteries or AC-coupled flow batteries.
21 Both systems use a series of self-contained containers and will be within the larger solar facility
22 area fence line (and may or may not be separately fenced within the overall footprint).⁵³ The
23 area around the BESS will be graveled, with no vegetation present.⁵⁴ Outdoor lighting at the
24 BESS will be kept to a minimum through the use of motion sensors and switches to reduce
25 lighting to the minimum required for safety when not in use, and lighting will be directed
26 downward and inward to prevent off-site glare.⁵⁵

27
28 The battery storage design will include, but not be limited to, the following elements.

- 29 • Battery storage equipment, including batteries and racks or containers, inverters,
30 isolation transformers, and switchboards;
- 31 • Balance of plant equipment, which may include medium-voltage and low-voltage
32 electrical systems, fire suppression, heating, ventilation, and air-conditioning systems,
33 building auxiliary electrical systems, and network/SCADA systems;
- 34 • Cooling system, which may include a separate chiller plant located outside the battery
35 racks with chillers, pumps, and heat exchangers; and

⁵⁰ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 31-32 of 51.

⁵¹ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 31-32 of 51.

⁵² NHWAPPD02-29 ASC Exhibit DD. Specific Standards_2022-01-31. Page 10-11 of 16.

⁵³ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 25-27 of 51.

⁵⁴ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 19-20 of 51.

⁵⁵ NHWAPPD02-17 ASC Exhibit R. Scenic_2022-01-31. Page 25 of 47.

- High-voltage (HV) equipment, including a step-up transformer, HV circuit breaker, HV current transformers and voltage transformers, a packaged control building for the HV breaker and transformer equipment, HV towers, structures, and HV cabling.⁵⁶

Both the lithium-ion and flow battery technologies are often placed in standard-sized shipping containers, on a concrete slab. Each container holds the batteries, a supervisory and power management system, cooling system (typical for lithium-ion), and a fire prevention system. By connecting multiple containers, the battery storage system can be scaled to the desired capacity. Containers may be stacked up to two levels with an estimated maximum height of approximately 20 feet.⁵⁷ Both BESS options will be stored in steel modules. The modules will be stored on a concrete pad to capture any leaks that may occur.⁵⁸

The lithium-ion BESS could include up to 240 containers, approximately 22 feet long by 8 feet wide by 9.5 feet tall (4 containers per 2-MW block, in 60 distributed locations. (See ASC Exhibit B, Figure B-9). The representative flow BESS assumes four adjacent 25-MW battery blocks, each consisting of three standard International Organization for Standardization (or ISO) high-cube containers: one 40-foot anolyte container and one 40-foot catholyte container arranged side by side at ground level, with a 20-foot container for battery cell stack and power conversion equipment stacked on top accessible by stairs and platform (See ASC Exhibit B, Figure B-10). The overall flow BESS dimension per block is 40 feet long by 16 feet wide by 19.5 feet tall. The BESS area will be within the permanent solar siting area fence line (though may have its own additional fencing).⁵⁹

Meteorological Towers

The facility will include up to three permanent met towers. The met towers will be either a freestanding, non-guyed design or guyed wire towers, depending on landowner input, with a maximum height of up to approximately 266 feet. The foundation of each permanent met tower will be a square concrete pad approximately 24 feet by 24 feet (See ASC Exhibit B, Figure B-11). In addition, an access road will be constructed to reach each met tower. Federal Aviation Administration (FAA) lighting may be installed on the met towers, depending on the overall lighting scheme for the facility, to be determined prior to operation and in consultation with FAA, which is discussed further in Section I.V.M.6., *Air Traffic*, of this order.⁶⁰

Communication and SCADA System

The facility will include a communication system consisting of fiber optic and copper communication lines that will connect the wind turbines, solar array, BESS, and substations to

⁵⁶ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 26 of 51.

⁵⁷ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 32-33 of 51.

⁵⁸ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 32-33 of 51.

⁵⁹ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 32-33 of 51.

⁶⁰ NHWAPPD02-1 ASC Exhibit B. Project Desc_2022-01-31. Page 27 of 51.

the O&M Building. These communication lines will run with the collector lines, either buried or overhead, depending on site-specific conditions. Where buried, the communication lines will be placed above the collector lines in a trench, and where overhead, will run alongside the collector lines. The Supervisory Control Data Acquisition (SCADA) system monitors facility components and the met tower data for variables such as meteorological conditions, critical operating parameters, and power output, and allows each component of the system to be monitored and controlled, even remotely, for activity in present time. If an issue occurred with a wind turbine or solar string, it will alert the O&M staff so that the component can be shut down to minimize consequences of failure, fires, and potential safety risks.

Operations and Maintenance Building

The facility will include one, 6,000-square foot Operations and Maintenance (O&M) building, on 7.6 acres adjacent to the northern substation (See Figures 2 and 3).⁶¹ The area around the O&M Building will be graveled, with no vegetation present.⁶² The O&M building will consist of a warehouse, maintenance bay, control room, office, break room, kitchen, bathroom with shower, utility room, server room, and storage room. Electricity and telephone service will be provided to the O&M building from local providers using overhead or underground lines. Outdoor lighting at O&M Building will be kept to a minimum through the use of motion sensors and switches to reduce lighting to the minimum required for safety when not in use, and lighting will be directed downward and inward to prevent off-site glare.⁶³ The O&M Building will be designed and constructed to be generally consistent with the character of agricultural buildings used by farmers or ranchers in the area, and the buildings finished in a neutral color to blend with the surrounding landscape.

A backup Uninterrupted Power Supply (UPS) system will be stored in the control room, to include up to 2 lead-acid batteries (See ASC Exhibit B, Section 4.0). Water will be provided by a permit exempt on-site well. Water use is estimated at 50 to 100 gallons per day per worker, for a total of less than 5,000 gallons per day. The kitchen, toilets, and shower will drain into an on-site septic system, also located within the fenced area, to be permitted for the building prior to construction through Umatilla County.

Access Roads

Within the micrositings area for wind facility components, the site will include approximately 43 miles of new permanent access roads and 19 miles of road improvements to existing roads on private property. Temporary access road disturbance will extend 82 feet in width and accounts for the road, crane paths, cut and fill slopes, and any necessary drainage or erosion control features. Permanent access roads will extend 16 feet in width. Gates will be installed on access roads to reduce unauthorized access when requested by property owners and access roads

⁶¹ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 27-28 of 51.

⁶² NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 19-20 of 51.

⁶³ NHWAPDoc2-17 ASC Exhibit R. Scenic_2022-01-31. Page 25 of 47.

1 developed or improved for the purposes of operation will be gated and locked when not
2 actively in use in coordination with private landowners.

3
4 Within the micrositing area for solar facility components, the site will include 16-20-foot-wide
5 access roads within the perimeter fence line, assumed as a permanent disturbance for the
6 facility footprint. An additional approximately 18 miles of new permanent access roads will be
7 constructed to access the solar array and BESS within the permanent solar siting area fence
8 line.⁶⁴

9
10 All newly constructed and improved site access roads will be graded and graveled to meet load
11 requirements for heavy construction equipment, as necessary. Most site access roads will be
12 initially constructed to be wider than needed for operations, to accommodate the large
13 equipment needed for construction. Following turbine construction, the site access roads will
14 be narrowed for use during O&M.⁶⁵

15 16 *Construction Yards, Staging Areas*

17
18 The facility will include an approximately 27-acre temporary graveled staging area within the
19 site boundary, located off CR 1350, adjacent to the northern substation. The staging area will
20 contain field construction offices; will be used to store construction equipment when not in
21 use; will be used for storage of construction supplies and materials; may contain up to two
22 temporary concrete batch plants (permitted by a third-party); and may be used for assembly of
23 some facility components. Approximately 500 gallons of diesel fuel and 200 gallons of gasoline
24 will be kept on-site for the refueling of construction equipment and stored at the temporary
25 construction yard. These fuels will be stored in temporary aboveground tanks at the
26 construction yard, within an area that provides for secondary containment. Fuels will be
27 delivered to the construction yard by a licensed specialized tanker vehicle.

28
29 In addition to the central temporary staging area, 8 to 11 smaller temporary staging areas (less
30 than 1,000 square feet each) will be distributed throughout the site boundary to support
31 construction. All together, these areas will entail less than 0.5 acre total of temporary
32 disturbance.⁶⁶

33
34 Restoration of temporary staging areas will typically involve removal of gravel surfacing;
35 regrading to pre-construction contours; restoration of topsoil as needed; soil decompaction if
36 necessary; and seeding and/or planting to restore agricultural or habitat lands as appropriate.
37 Revegetation efforts are discussed in detail in Attachment P-2: Draft Revegetation and Noxious
38 Weed Plan and in Section I.V.H., *Fish and Wildlife Habitat*.

⁶⁴ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 28-29 of 51.

⁶⁵ NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31. Pages 8-9 of 16.

⁶⁶ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 29-30 of 51.

III.B. Description of Facility Construction, Operation and Retirement

III.B.1. Construction

Facility construction may occur in phases and include the following:

- Up to 500 workers per day, 30 percent hired locally.
- Up to 234 one-way delivery truck trips per day during construction, and up to 800 one-way private vehicle trips per day to bring workers to the facility site.

Temporary disturbance per facility components is limited in accordance with the representations presented below:

Facility – Temporary Disturbance Limits

Project Component	Units	Dimensions per Unit	Number of Units	Temporary Disturbance Acres
Wind Turbines	Acres	6.5	112	713.4
Overhead 34.5-kV Collector Lines	Feet of width per linear foot	35	9.1 (mi)	28.8
Underground 34.5-kV Collector Lines	Feet of width per linear foot	35	89.0 (mi)	250.5
230-kV Project Substation Connector Transmission Line	Feet of width per linear foot	200	6.8 (mi)	160.7
Pulling & Tensioning Areas	Acres	0.75	10	7.5
230-kV UEC Cottonwood Transmission Line Route	Feet of width per linear foot	200	25.3 (mi)	613.6
230-kV BPA Stanfield Transmission Line Route	Feet of width per linear foot	200	5.0 (mi)	122.3
Meteorological Towers	Square feet	154,750	3	10.5
Existing Access Roads to Be Improved	Feet of width per linear foot	66	19 (mi)	151.6
New Access Roads	Feet of width per linear foot	66	42.8 (mi)	342.9
Turning Radius Widening	Acres	--	--	13.5
Crane Paths	Feet of width per linear foot	75	50.9 (mi)	368.5
Substations	Acres	1.5 (N)/ 2.5 (S)	2	3.9
Central Construction Yard	Acres	--	1	n/a

Facility – Temporary Disturbance Limits

Project Component	Units	Dimensions per Unit	Number of Units	Temporary Disturbance Acres
Distributed Staging Areas	Acres	--	11	0.2
O&M Building	Acres	--	1	0.6
Solar Siting Area	Acres	--	1	11.6
Total Temporary Impact ¹ =				2,075.4
Notes:				
1. Temporary disturbance impacts must be scaled based on the number of facility components.				

III.B.2. Operations and Maintenance

Routine operations and maintenance for all facility components will include revegetation, noxious weed control, erosion inspection and maintenance and equipment operability inspection and maintenance.

Annual vegetation management will be implemented along transmission line corridors. Routine O&M will also include wind turbine part replacement, including redisturbance of areas temporarily disturbed during construction, and battery and solar panel replacement.

III.B.3. Facility Decommissioning and Site Restoration

Facility decommissioning and site restoration will be completed in accordance with a Council approved decommissioning plan pursuant to OAR 345-025-0006(9) and OAR 345-027-0410. Nonetheless, consistent with OAR 345-025-0006(3), facility decommissioning and site restoration shall be completed substantially as described in the site certificate, as follows:

- Aboveground structures will be dismantled (such as wind turbines, met towers, solar and battery components, aboveground electrical equipment including collector lines transmission lines and poles, and the O&M building and substations). Components will be removed from the site for recycle, sale or disposal.
 - Electrical components including substations, collector lines, and transmission lines, along with their support structures will be dismantled.
 - Subsurface features including underground collector lines and concrete foundations will be removed to a minimum of 3 feet below ground surface or as agreed with the landowner, to allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes.

- Access roads will be reclaimed by regrading and removal of road surfaces, and surface soils restored to original conditions, based on landowner consultation. If the landowner prefers to retain roads, they will be left in place. Reclamation procedures will be based on site specific requirements and techniques commonly employed at the time the area is to be reclaimed. As appropriate and based on intended use of the land following decommissioning, the land will be reseeded in accordance with a revegetation plan.
- Fluids will be drained onsite and transported offsite for disposal at a licensed facility, if flow batteries are selected for the BESS. Containers will be recycled or disposed at an approved facility.

III.C. Facility Location, Site Boundary and Micrositing Areas

The facility will be located within an approximately 48,196 acre site boundary⁶⁷ in northwestern Umatilla County, Oregon. The site boundary is located south of I-84, approximately 4 miles south of Echo and 10 miles west of Pendleton.

The site boundary includes a wind facility micrositing area, inclusive of the three 230 kV transmission line corridors⁶⁸ and a solar facility micrositing area. The site boundary is presented in Figure 1: *Regional Location of Facility and Site Boundary*.

Micrositing Areas

Micrositing areas⁶⁹, when approved by Council, are intended to allow flexibility in siting of facility components and locations of temporary disturbance. For this ASC, the applicant seeks approval of an approximately 13,767 acre wind micrositing area, which includes each of the proposed 230 kV transmission lines, and an approximately 1,896 acre solar micrositing area. All of the micrositing areas are presented in Figure 2: *Micrositing Areas* below.

Within the 13,767 acre wind micrositing area, turbine strings will include 1,000 to 1,700-foot wide corridors. Access roads and collector lines will be located in 300 to 360-foot wide corridors. The northern and southern project substations, met towers, the O&M Building, and construction yards will be located in wider corridors.⁷⁰

The 230 kV transmission line corridors will range from 300 to 1,600 feet and will extend the length of the lines. The total length of the proposed 230 kV UEC Cottonwood route, including

⁶⁷ OAR 345-001-0010(54) defines “site boundary” as the perimeter of the site of a proposed energy facility and its related or supporting facilities, all temporary laydown and staging areas and all corridors proposed by the applicant; ORS 469.300(25) defines “site” as all land upon which an energy facility and its related or supporting facilities is located or proposed to be located.

⁶⁸ OAR 345-001-0010(13) defines “corridor” as a continuous area of land not more than one-half mile in width and running the entire length of a proposed transmission line or pipeline.

⁶⁹ OAR 345-001-0010(32) defines “micrositing corridor” as a continuous area of land within which construction of facility components may occur, subject to site certificate conditions.

⁷⁰ NHWAPPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 7-4 of 51.

both the new and upgraded segments, will be approximately 25.3 miles, constructed in segments as follows:

- From the northern facility substation to the corner of White House Road and County Road 1348, the UEC Cottonwood route will consist of approximately 8.4 miles of new transmission corridor and construction.
- From the corner of White House Road and County Road 1348 to the UEC Butter Creek Substation, an approximately 9.6-mile portion of the UEC Cottonwood route will replace an existing 12.47-kV distribution line with the proposed 230-kV transmission line with 12.47-kV underbuilt distribution.
- Continuing from the UEC Butter Creek Substation, an existing 115-kV UEC transmission line will be upgraded to incorporate a 230-kV line to carry power generated by the facility approximately another 7.3 miles north to the UEC Cottonwood Substation. The upgrade will consist of replacing the existing support poles with new structures that can support restringing the existing 115-kV transmission line and adding a 230-kV transmission line (double circuit).
- After the Cottonwood Substation, power from the Project will be transmitted over an existing 230-kV line north to the BPA McNary Substation.⁷¹

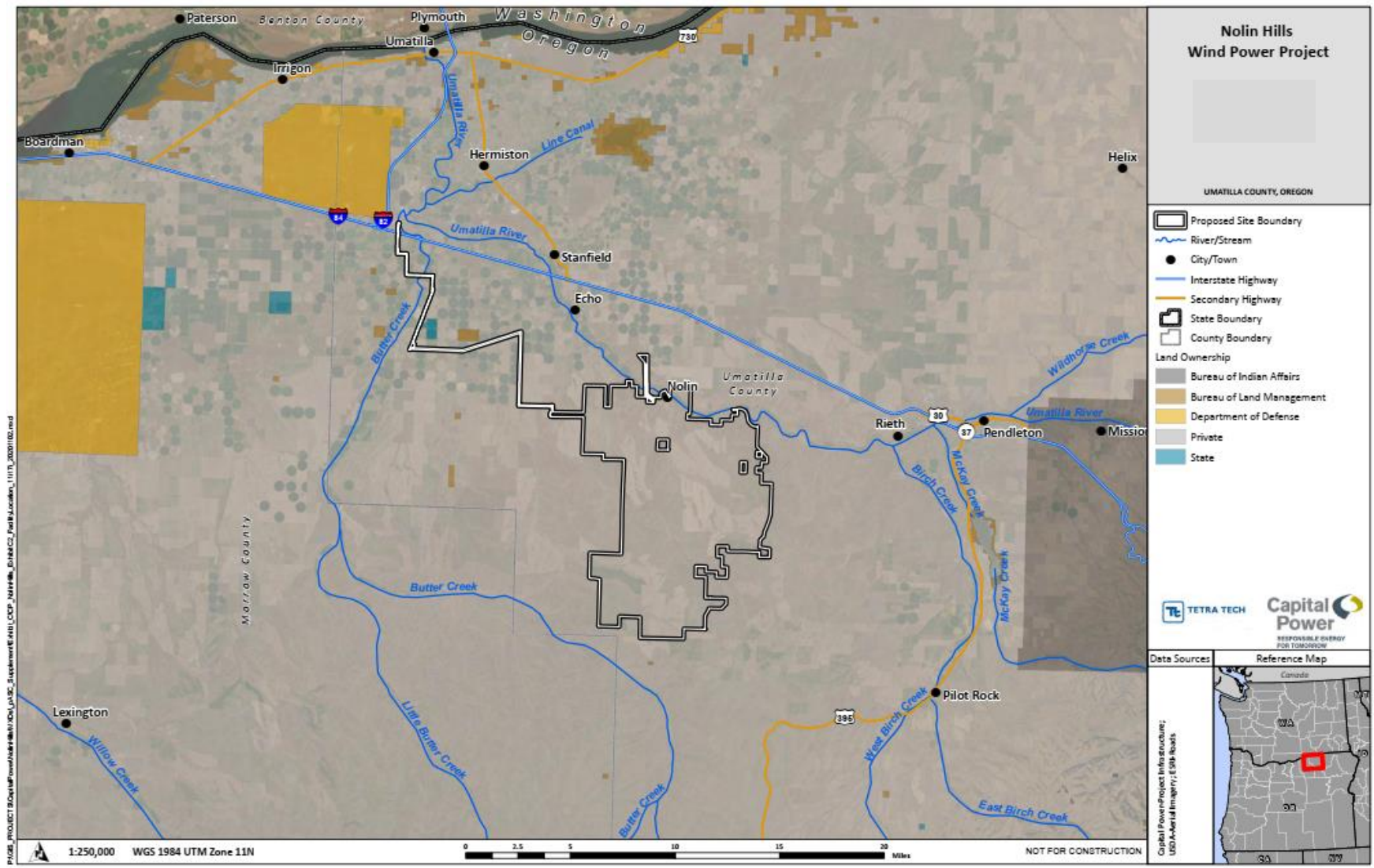
The proposed 230 kV BPA Stanfield route leads north following County Road 1350 from the northern substation, then turns northwest parallel to an existing BPA transmission line (to be sited outside of BPA's existing right-of-way (See ASC Exhibit DD, Section 10.2). Approximately 1.5 miles upriver from the community of Nolin, the transmission line will span the Umatilla River and continue in parallel with the existing transmission line to the Stanfield Substation.

The proposed 230 kV Substation Connector transmission line will extend 6.8 miles from the southern project substation to the northern project substation.⁷²

⁷¹ NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31. Pages 10-11 of 16.

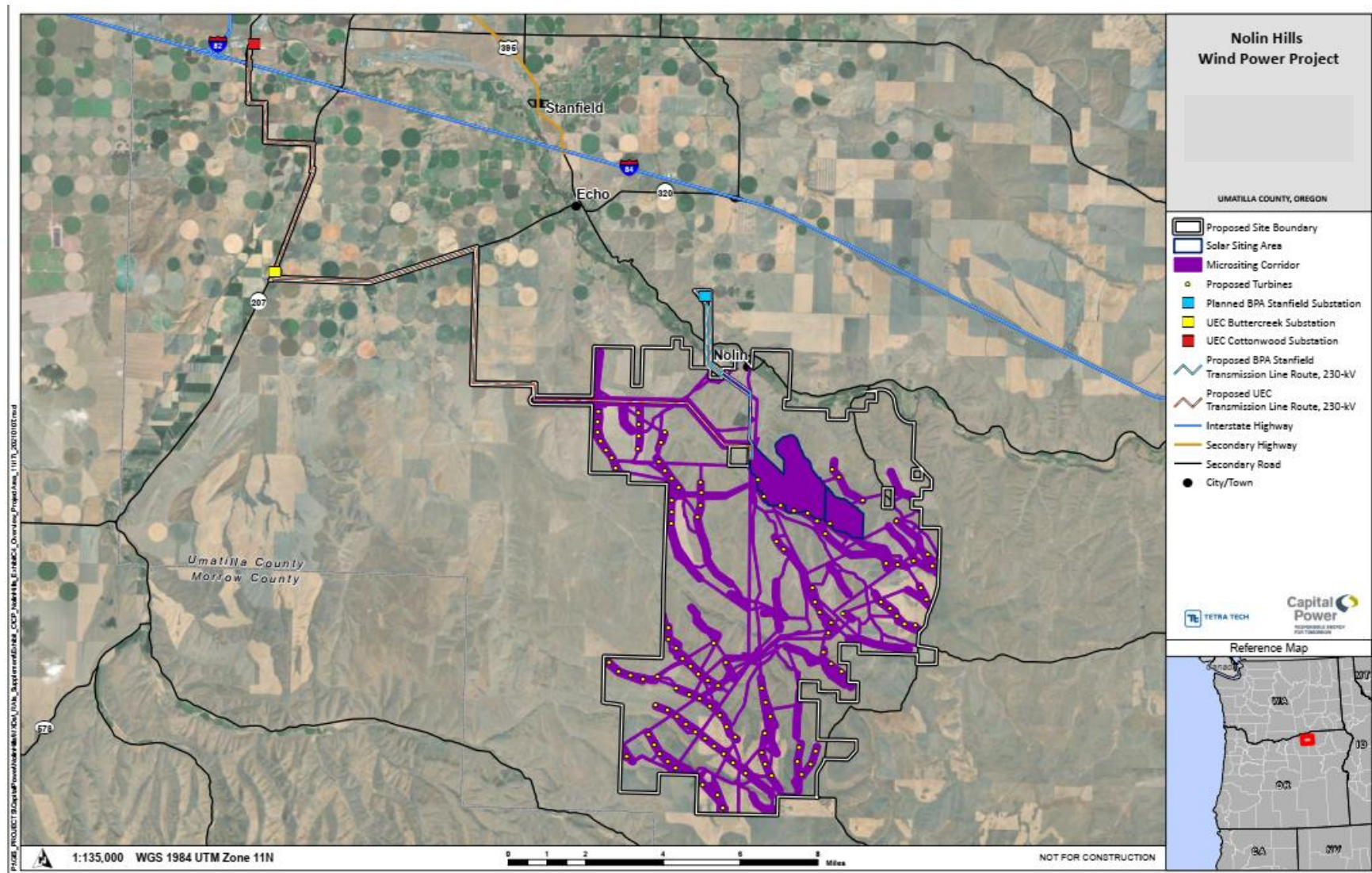
⁷² NHWAPDoc2-2 ASC Exhibit C. Project Location_2022-01-31. Page 16 of 60.

1 **Figure 1: Regional Location of Facility and Site Boundary**



2

1 Figure 2: Micrositing Areas



IV. EVALUATION OF COUNCIL STANDARDS

To issue a site certificate for a proposed facility, the Council must determine that “the facility complies with the applicable standards adopted by the council pursuant to ORS 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards that the facility does not meet.”⁷³ The Council must also determine that the proposed facility complies with all other applicable Oregon statutes and administrative rules, as identified in the Amended Project Order, excluding requirements governing design or operational issues that do not relate to siting and excluding compliance with requirements of federally-delegated programs.^{74,75} Nevertheless, the Council may consider these programs when assessing compliance with its own standards and other applicable rules.⁷⁶

Under ORS 469.310, the Council is charged with ensuring that the “siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety.” ORS 469.401(2) further provides that the Council must include in the site certificate “conditions for the protection of the public health and safety, for the time for completion of construction, and to ensure compliance with the standards, statutes and rules described in ORS 469.501 and ORS 469.503.”⁷⁷ The Council implements this statutory framework by adopting findings of fact, conclusions of law, and conditions of approval concerning the proposed facility’s compliance with the Council’s Standards for Siting Facilities at OAR 345 Divisions 22, 24 and 26.

This final order includes the Council’s analysis of whether the applicant can satisfy each applicable Council Standard, statutes, administrative rules and applicable local government ordinances (with mitigation and subject to compliance with conditions, as applicable). This analysis is based on whether the applicant has demonstrated that a preponderance of evidence on the administrative record of the proposed order and record of the contested case proceeding (decision records) supports findings and conclusions of compliance with all applicable requirements.

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

⁷³ ORS 469.503(1).

⁷⁴ As stated above, 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.

⁷⁵ ORS 469.401(4); ORS 469.503(3).

⁷⁶ 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.

⁷⁷ ORS 469.401(2)

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

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

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

21 (2) The Council may issue or amend a site certificate for a facility that does not meet one
22 or more of the applicable standards adopted under ORS 469.501 if the Council
23 determines that the overall public benefits of the facility outweigh any adverse effects on
24 a resource or interest protected by the applicable standards the facility does not meet.
25 The Council shall make this balancing determination only when the applicant has shown
26 that the proposed facility cannot meet applicable Council standards or has shown, to the
27 satisfaction of the Council, that there is no reasonable way to meet the applicable
28 Council standards through mitigation or avoidance of any adverse effects on a protected
29 resource or interest. The applicant has the burden to show that the overall public
30 benefits outweigh any adverse effects on a resource or interest, and the burden
31 increases proportionately with the degree of adverse effects on a resource or interest.
32 The Council shall weigh overall public benefits and any adverse effects on a resource or
33 interest * * *
34

35 (4) In making determinations regarding compliance with statutes, rules and ordinances
36 normally administered by other agencies or compliance with requirement of the Council
37 statutes if other agencies have special expertise, the Department of Energy shall consult
38 such other agencies during the notice of intent, site certificate application and site
39 certificate amendment processes. Nothing in these rules is intended to interfere with the
40 state's implementation of programs delegated to it by the federal government.
41

Findings of Fact

OAR 345-022-0000 provides the Council's General Standard of Review and requires the Council to find that a preponderance of evidence on the record supports the conclusion that the proposed facility complies with the requirements of EFSC statutes and the siting standards adopted by the Council and that the proposed facility complies with all other Oregon statutes and administrative rules applicable to the issuance of a site certificate for the proposed facility, as identified in the Amended Project Order.

In this final order, the Council makes findings of fact and conclusions of law based on a Council evaluation of the facility's compliance with all statutes, administrative rules and ordinances applicable to the issuance of this site certificate. As discussed above, the Department consulted with other agencies during review of the ASC to aid in the evaluation of the facility's compliance with statutes, rules and ordinances otherwise administered by other agencies. Additionally, the Council relied upon the reviewing agencies' special expertise in evaluating the facility's compliance with the requirements of the Council's standards.

Balancing Determination [OAR 345-022-0000(2)]

OAR 345-022-0000(2) applies to ASCs where an applicant "has shown that the proposed facility cannot meet Council standards or has shown, to the satisfaction of Council, that there is no reasonable way to meet the applicable Council standards through mitigation or avoidance of any adverse effects on a protected resource or interest."

Therefore, OAR 345-022-0000(2) first establishes one of two criteria that must be met for Council to consider a request to make a balancing determination. Either the applicant must *show* that it *cannot* meet a standard; or, similarly, the applicant must *show* that there is *no reasonable way* to meet the standard through mitigation or avoidance [Emphasis added]. The Council interprets these factors to establish that 1) the Department cannot independently recommend Council make a balancing determination – it must be based on a request by the applicant, and 2) the applicant must support their request with evidence that demonstrates the standard cannot be met at all or through mitigation or avoidance. OAR 345-022-0000(2) also requires the applicant to show "that the overall public benefits outweigh any adverse effects on a resource or interest" and establishes criteria for the Council to consider when evaluating adverse effects and public benefits.

The applicant requests that Council make a balancing determination.⁷⁸ The applicant believes ASC Exhibit P contains evidence to support a finding of compliance with the Council's Fish and Wildlife Habitat standard because it has adequately evaluated potential temporary and permanent habitat impacts, and proposed mitigation based on its habitat categorization and associated mitigation goals. However, the applicant requested that Council make a balancing determination in the event that ODFW's interpretation of Category 1 Washington Ground

⁷⁸ NHWAPPDoc2-15 ASC Exhibit P. Fish and Wildlife_2022-01-31. Page 52 of 619.

1 Squirrel (WGS) habitat (785-foot buffer from colonies) is accepted by Council, which would
2 result in a designation of 84 Category 1 acres within the wind micro-siting area. The applicant
3 represents that the Category 1 designation would impair siting flexibility and would eliminate
4 the location of 2 wind turbines (9 temporary and 1 permanent acres of disturbance) and
5 associated facilities such as roads.

6
7 The 84 acres are densely vegetated with cheatgrass and tall tumble mustard; they lack later
8 seral stage vegetation characteristics; they may lack the soil stability to support deep burrowing
9 by WGS; and are within fallow wheat fields enrolled in the U.S. Department of Agriculture's
10 Conservation Reserve Program (CRP).⁷⁹ Applicant proposes that the habitat is Category 5.
11 ODFW recommends that these acres be considered Category 1 habitat because they are within
12 785-feet of field-identified WGS colonies and that because there are no habitat breaks (i.e.,
13 linear rock rim, outcrop, paved road), the area provides important habitat connectivity for
14 dispersing WGS and provides essential fat, protein, water and nesting materials. ODFW explains
15 that habitat quality is not the determining factor for whether the habitat is irreplaceable and
16 essential – it is the proximity to the colony and the function and value of habitat connectivity
17 for WGS dispersal.

18
19 ODFW's recommendation is consistent with its previous recommendations, adopted by Council
20 in the Final Order on Request for Amendment 1 of the Carty Generating Station Site Certificate
21 and Final Order on the Application for Site Certificate for the Montague Wind Power Facility⁸⁰
22 and based upon a 1980 Final Technical Report, *Geographic Range, Habitat Requirements and a*
23 *Preliminary Population Study of *Spermophilus washintoni**.⁸¹ Because the Council's Fish and
24 Wildlife Habitat standard requires the Council to find that the proposed facility would be
25 consistent with ODFW's Fish and Wildlife habitat mitigation goals, and ODFW is specifically
26 recommending areas be designated Category 1 in order to be consistent with its Category 1
27 habitat definition, the Council finds that the 84 acres are Category 1 and therefore must be
28 avoided in order to be consistent with the Category 1 habitat mitigation goal, unless balancing
29 is approved.

30
31 *Whether Applicant Has Demonstrated That It Cannot Meet the Standard*

32
33 The next question is whether the applicant has provided sufficient information to demonstrate
34 the proposed facility cannot meet the Fish and Wildlife Habitat standard with regards to the 84
35 acres. The applicant does not evaluate why it cannot meet the standard or why there is no
36 reasonable way to meet the standard through mitigation or avoidance. The applicant focuses
37 instead on seeking to demonstrate why the public benefits of the proposed facility outweigh
38 any adverse effects on WGS habitat.

⁷⁹ NHWAPDoc2-15 ASC Exhibit P. Fish and Wildlife_2022-01-31. Page 50-64 of 619.

⁸⁰ EFSC Final Order on Amendment of Carty Generating Station. December 2018, p.100, line 9-14. EFSC Final Order on Montague Wind Power Facility. September 2010, p.100, lines 19-28.

⁸¹ 1980. Carlson, L. and Geupel, G., Kjelson, J., MacIvor, J., Morton, M. and Shishido, N. Geographic Range, Habitat Requirements and a Preliminary Population Study of *Spermophilus washingtoni*. Final Technical Report. Prepared under a grant from the National Science Foundation, Grant No. SMI 5350.

1
2 The facility includes both wind and solar components and may have a total nominal capacity of
3 600 MW, inclusive of up to 112 wind turbines. Within the 84 Category 1 acres, siting of two
4 wind turbines would be prohibited via the Category 1 mitigation goal, or 1% of the nominal
5 generating capacity of the proposed facility. The applicant has not indicated why the two wind
6 turbines proposed could not be relocated elsewhere or even if they were eliminated, how the
7 viability of the project would be jeopardized due to their loss. The applicant has not provided
8 maps or arguments that suggest avoidance is not possible due to technological or engineering
9 constraints; or that avoidance would result in greater impacts to other resources. Therefore,
10 the Council finds that the applicant has not provided any arguments or evidence to support a
11 conclusion that the proposed facility could not avoid the 84 acres.

12
13 Due to the life history and biology of WGS, it is possible that WGS colonies identified during the
14 applicant's 2020 surveys are no longer present within previously identified locations.
15 Threatened and Endangered Species Condition 1 and Fish and Wildlife Habitat Conditions 1 and
16 2⁸² will require that the applicant conduct preconstruction surveys within WGS suitable habitat,
17 including lands enrolled in CRP, to inform final habitat categorization, avoidance and mitigation
18 requirements. The preconstruction surveys allow for any changes in WGS colony location to be
19 accounted for and will result in either new or different avoidance area requirements, based on
20 a delineation of Category 1 habitat extending 785-feet from identified colonies, or removal of
21 avoidance requirements where previously identified WGS colonies are no longer present.

22
23 For these reasons, the Council has decided not to grant the requested balancing determination.

24
25 *Certificate Expiration [OAR 345-027-0000]*

26
27 Under OAR 345-015-0085(8), the site certificate is effective upon execution by the Council and
28 the applicant. ORS 469.370(12) requires the Council to "specify in the site certificate a date by
29 which construction of the facility must begin." ORS 469.401(2) requires that the site certificate
30 contain a condition "for the time for completion of construction." Under OAR 345-027-0313, in
31 order to avoid expiration of the site certificate, the certificate holder must begin construction of
32 the facility no later than the construction beginning date specified by Council in the site
33 certificate. "Construction" is defined in ORS 469.300(6) to mean "work performed on a site,
34 excluding surveying, exploration or other activities to define or characterize the site, the cost of
35 which exceeds \$250,000." OAR 345-010-0010(12) adopts the statutory definition.

36
37 The duration of facility construction is estimated at 18 months, and will include phased
38 construction, To allow flexibility to construct in phases or flexibility to accommodate weather
39 delays, the applicant requested a deadline for construction completion of 3 years later than the

⁸² The Revegetation Plan required under Fish and Wildlife Habitat Conditions 1 and 2 would require preconstruction surveys to inform preconstruction noxious weed infestation locations, Laurent's milkvetch population locations and establish monitoring and reference locations for revegetation. Results of these surveys, in combination with the protocol WGS surveys under Threatened and Endangered Species Condition 1, would be used to inform the final mitigation and avoidance obligation under the Council's Fish and Wildlife Habitat standard.

1 deadline for beginning construction, or 6 years from issuance of the site certificate.⁸³ Based on
2 the Council's experience with large energy facilities, a number of unforeseen factors can cause
3 delays to a facility's construction commencement and completion timelines, such as financial,
4 economic, or technological changes, therefore the Council finds that an applicant should have
5 some flexibility to secure contracts for the power as well as complete all necessary pre-
6 construction compliance with applicable site certificate conditions.

7
8 The applicant's request is consistent with construction commencement and completion dates
9 that the Council has approved for recent Final Order on ASCs. Therefore, the Council agrees
10 with the applicant's timeframes and set a three-year deadline after the issuance of the site
11 certificate for the applicant to begin construction, and a three-year deadline after construction
12 commencement for the applicant to complete construction. Under OAR 345-015-0085, the site
13 certificate becomes effective upon execution by the Council and by the applicant. However, for
14 purposes of identification, the Council may establish the effective date of a site certificate
15 based on the date of the Council action. Accordingly, and in compliance with OAR 345-027-
16 0020(4), the Council adopts the following condition:

17
18 **General Standard Condition 1 (GEN):** The certificate holder shall begin and complete
19 construction of the facility by the dates specified in the site certificate.

- 20 a. Construction of the facility shall commence within three years after the date of
21 Council action [DATE TO BE SPECIFIED]. Within 7 days of construction
22 commencement, the certificate holder shall provide the Department written
23 verification of the construction commencement date and that it has met the
24 construction commencement deadline.
- 25 b. Construction of all facility components shall be completed within three years after
26 construction commencement identified in (a) of this condition. Within 7 days of
27 construction completion, the certificate holder shall provide the Department written
28 verification that it has met the construction completion deadline.
29 [GEN-GS-01; Mandatory Condition OAR 345-025-0006(4)]

30
31 *Mandatory and Site-Specific Conditions in Site Certificates [OAR 345-025-0006 and OAR 345-
32 025-0010]*

33
34 OAR 345-025-0006 lists certain mandatory conditions that the Council must adopt in every site
35 certificate. Mandatory conditions OAR 345-025-0006(7) through (9) and (16) are discussed and
36 applied in Section IV.G., *Retirement and Financial Assurance*, of this order as they relate to the
37 restoration of the site, Council approval of a retirement plan, and bonding requirements of the
38 applicant. Mandatory conditions OAR 345-025-0006(12) through (14) are discussed and applied
39 in Section IV.C., *Structural Standard* because they are associated with the design, construction,
40 and the operation of the facility to avoid dangers of seismic hazards, coordination with and
41 notifications to the Department of Geology and Mineral Industries. In addition, pursuant to
42 OAR 345-025-0006(10), the Council includes as conditions in the site certificate all

⁸³ NHWAPPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Page 36 of 51.

representations in the ASC and supporting record the Council deems to be binding commitments made by the applicant, as necessary to avoid or minimize a potential impact. Mandatory conditions under OAR 345-025-0006 that are not otherwise addressed in the evaluation of compliance with specific standards are presented below:

General Standard Condition 2 (OPR): 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.

[OPR-GS-01; Mandatory Condition OAR 345-025-0006(2)]

Mandatory Condition under OAR 345-025-0006(3) requires that, among other items, the applicant design, construct, operate, and retire the facility substantially as described in the site certificate. The approved site certificate provides all site certificate conditions as well as a description of the energy facility and its related or supporting facilities including component dimensions and design features, that are derived from Sections III.A.1., *Energy Facility* and Section III.A.2., *Related or Supporting Facilities*, of this order. The site certificate also includes a description of the activities involved with the construction, operation and maintenance and retirement of the facility which are similar to those described in Section III.B., *Description of Facility Construction, Operation and Retirement*. Finally, the site certificate includes a description of the approved site boundary and micro-siting corridors and may include a discussion of avoidance or restricted areas.

General Standard Condition 3 (GEN): 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.

[GEN-GS-02; Mandatory Condition OAR 345-025-0006(3)]

General Standard Condition 4 (PRE): Except as necessary for the initial survey or as otherwise allowed for wind energy facilities, transmission lines or pipelines under this section, the certificate holder shall not begin construction, as defined in OAR 345-001-0010, or create a clearing on any part of the site until the certificate holder has construction rights on all parts of the site. For the purpose of this rule, "construction rights" means the legal right to engage in construction activities. For the transmission line associated with the energy facility, if the certificate holder does not have construction rights on all parts of the site, the certificate holder may nevertheless begin construction, as defined in OAR 345-001-0010, or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate

holder will construct and operate part of the facility on that part of the site even if a change in the planned route of a transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site.

[PRE-GS-01; Mandatory Condition OAR 345-025-0006(5)]

General Standard Condition 5 (GEN): 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.

[GEN-GS-03; Mandatory Condition OAR 345-025-0006(6)]

General Standard Condition 6 (GEN): 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.

[GEN-GS-04; Mandatory Condition OAR 345-025-0006(11)]

In the event there is a change in the ownership, possession or control of the facility or the applicant, a transfer of the site certificate is required subject to the requirements of OAR 345-027-0100. A transfer of the site certificate does not terminate the transferor's duties and obligations under the site certificate until the Council approves a request for amendment to transfer the site certificate and issues an amended site certificate. Mandatory Condition OAR 345-025-0006(15) below is included in each site certificate.

General Standard Condition 7 (GEN): 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 345-027-0400 apply to any transfer of ownership that requires a transfer of the site certificate.

[GEN-GS-05; Mandatory Condition OAR 345-025-0006(15)]

1
2 *Site Specific Conditions [OAR 345-025-0010]*
3

4 In addition to mandatory conditions imposed on all facilities, the Council rules also include “site
5 specific” conditions at OAR 345-025-0010 that the Council may include in the site certificate to
6 address issues specific to certain facility types or proposed features of facilities.⁸⁴ OAR 345-025-
7 0010(5) authorizes Council to impose a condition establishing the corridors approved for siting,
8 constructing and operating transmission lines. Pursuant to OAR 345-001-0010(7), a
9 transmission line corridor must be continuous and may not be more than ½-mile in width.

10
11 The facility includes three transmission lines: 6.8-mile, 230 kV Substation Connector line; 25.3
12 mile, 230 kV UEC Cottonwood transmission line; and 5-mile, 230 kV BPA Stanfield transmission
13 line. The micrositing corridors approved for these three transmission lines are presented in ASC
14 Exhibit C, Figures C-4 – C-4.38 and are up to 1,600 feet in width in some locations. The
15 disturbance areas will be limited to 200-foot corridors within the micrositing corridor.⁸⁵ The
16 Council imposes the below site-specific condition applicable to the facility and the other
17 applicable site-specific condition is provided under Section IV.P.3., *Siting Standards for*
18 *Transmission Lines*, of this order.⁸⁶

19
20 **General Standard Condition 8 (GEN):** The certificate holder is authorized to construct
21 230-kV transmission lines anywhere within the approved transmission line micrositing
22 corridors, subject to the conditions of the site certificate. The approved transmission
23 line micrositing corridors include:

- 24 a. Substation Connector Line: Approximately 6.8 mile, single circuit 230-kV
25 transmission line extending between the two facility substations, as further
26 described in ASC Exhibits B and C and as presented in Figure 1 of the site certificate.
27 b. UEC Cottonwood Route: Approximately 25.3 mile transmission line extending from
28 the northern substation to the existing UEC Cottonwood Substation. Approximately
29 8.4 miles of new single-circuit 230-kV transmission line, approximately 9.6 miles of
30 replacement of an existing 12.47-kV distribution line with a 230-kV transmission line
31 and distribution underbuild, and approximately 7.3 miles of upgraded existing 115-
32 kV UEC transmission line to a double-circuit 230/115-kV line with 12.47-kV
33 underbuilt distribution, as further described in ASC Exhibits B and C and as
34 presented in Figure 1 of the site certificate.

⁸⁴ Site-Specific Conditions at OAR 345-025-0010(1)-(3), and (6)-(7) do not apply to the facility based on facility energy source/type (solar photovoltaic power generation facility with related and supporting facilities including a proposed 115 kV transmission line).

⁸⁵ NHWAPPDoc2-2 ASC Exhibit C Project Location_2022-01-31. Pages 7-9 of 60, Table C-2.

⁸⁶ In the DPO, the Department recommended that Council establish an approved transmission line corridor based on the width of the proposed transmission line right-of-way (200-feet). While the transmission line(s) would be located within a 200-foot right of way, the micrositing corridors presented in the ASC are wider than 200-feet. Therefore, consistent with the micrositing corridors presented in ASC Exhibit B and C (see ASC Exhibit C Figure C-4), the Department amended General Standard Condition 8 to ensure that the applicant has flexibility within the evaluated micrositing corridor to site the transmission line.

1 c. BPA Stanfield Route: Approximately 5-mile 230 kV transmission line extending from
2 the northern facility substation to the BPA Stanfield Substation, of which
3 approximately 3 miles parallel an existing BPA 500-kV transmission line, outside of
4 the existing transmission line's right-of-way, as further described in ASC Exhibits B
5 and C and as presented in Figure 1 of the site certificate.
6 [GEN-GS-06; Site Specific Condition OAR 345-025-0010(5)]
7

8 *Construction and Operation Rules for Facilities [OAR Chapter 345, Division 26]*
9

10 The Council adopted rules at OAR Chapter 345, Division 26 to ensure that construction,
11 operation, and retirement of facilities are accomplished in a manner consistent with the
12 protection of the public health, safety, and welfare and protection of the environment. These
13 rules include requirements for compliance plans, inspections, reporting and notification of
14 incidents prior to and during construction and during operation of the facility. For instance,
15 under OAR 345-026-0080(1)(a), within six months after beginning construction, and every six
16 months thereafter during construction of the facility and related or supporting facilities, the
17 certificate holder must submit a semiannual construction progress report (semiannual report)
18 to the Department. The semiannual report includes construction progress updates, subjects
19 listed in OAR 345-026-0080(2)(a), (d), (f) and (g), and any other reporting requirements detailed
20 in site certificate conditions. Once the facility is operational, between January 1 and April 30 of
21 each year, the applicant must submit an annual report to the Department addressing the
22 subjects listed in OAR 345-026-0080(2). When the reporting date coincides for the semiannual
23 report and the annual report, the applicant may include the construction progress report within
24 the annual report. The certificate holder must construct the facility substantially as described in
25 the site certificate and the certificate holder must construct, operate, and retire the facility in
26 accordance with all applicable rules adopted by the Council in OAR Chapter 345, Division 26.⁸⁷
27

28 The Council adopts General Standard Condition 9, 10 and 11, as presented below, to support
29 the Department's review of ongoing site certificate compliance, in accordance with OAR
30 Chapter 345, Division 26.
31

32 **General Standard Condition 9 (PRE):** At least 90 days prior to beginning construction of
33 the facility (unless otherwise agreed to by the Department), the certificate holder shall
34 submit to the Department a compliance plan documenting and demonstrating actions
35 completed or to be completed to satisfy the requirements of all site certificate terms
36 and conditions and applicable statutes and rules. The plan shall be provided to the
37 Department for review and compliance determination for each requirement. The
38 Department may request additional information or evaluation deemed necessary to
39 demonstrate compliance.
40 [PRE-GS-02; OAR 345-026-0048]
41

⁸⁷ Applicable rule requirements established in OAR Chapter 345 Division 26 include OAR 345-026-0005 to OAR 345-026-0170.

1 **General Standard Condition 10 (GEN):** Any matter of non-compliance under the site
2 certificate is the responsibility of the certificate holder. Any notice of violation issued
3 under the site certificate will be issued to the certificate holder. Any civil penalties under
4 the site certificate will be levied on the certificate holder.
5 [GEN-GS-07]

6
7 **General Standard Condition 11 (GEN):** In addition to the requirements of OAR 345-026-
8 0170, within 72 hours after discovery of incidents or circumstances that violate the
9 terms or conditions of the site certificate, the certificate holder must report the
10 conditions or circumstances to the Department.
11 [GEN-GS-08]

12 13 **Conclusions of Law**

14
15 Based on the foregoing findings of fact, conclusions of law, and subject to the referenced
16 conditions, mandatory conditions, and site-specific conditions, the Council finds that the facility
17 will satisfy the requirements of OAR 345-022-0000.

18 19 **IV.B. Organizational Expertise: OAR 345-022-0010**

- 20
21 (1) *To issue a site certificate, the Council must find that the applicant has the organizational*
22 *expertise to construct, operate and retire the proposed facility in compliance with*
23 *Council standards and conditions of the site certificate. To conclude that the applicant*
24 *has this expertise, the Council must find that the applicant has demonstrated the ability*
25 *to design, construct and operate the proposed facility in compliance with site certificate*
26 *conditions and in a manner that protects public health and safety and has demonstrated*
27 *the ability to restore the site to a useful, non-hazardous condition. The Council may*
28 *consider the applicant's experience, the applicant's access to technical expertise and the*
29 *applicant's past performance in constructing, operating and retiring other facilities,*
30 *including, but not limited to, the number and severity of regulatory citations issued to*
31 *the applicant.*
- 32 (2) *The Council may base its findings under section (1) on a rebuttable presumption that an*
33 *applicant has organizational, managerial and technical expertise, if the applicant has an*
34 *ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate*
35 *the facility according to that program.*
- 36 (3) *If the applicant does not itself obtain a state or local government permit or approval for*
37 *which the Council would ordinarily determine compliance but instead relies on a permit*
38 *or approval issued to a third party, the Council, to issue a site certificate, must find that*
39 *the third party has, or has a reasonable likelihood of obtaining, the necessary permit or*
40 *approval, and that the applicant has, or has a reasonable likelihood of entering into, a*
41 *contractual or other arrangement with the third party for access to the resource or*
42 *service secured by that permit or approval.*
- 43 (4) *If the applicant relies on a permit or approval issued to a third party and the third party*
44 *does not have the necessary permit or approval at the time the Council issues the site*

1 *certificate, the Council may issue the site certificate subject to the condition that the*
2 *certificate holder shall not commence construction or operation as appropriate until the*
3 *third party has obtained the necessary permit or approval and the applicant has a*
4 *contract or other arrangement for access to the resource or service secured by that*
5 *permit or approval.*
6

7 To demonstrate compliance with the Council's Organizational Expertise standard, the applicant
8 provided evidence regarding its experience and organizational expertise to construct, operate
9 and retire the facility in ASC Exhibit D (Applicant's Organizational Expertise), Exhibit M (Financial
10 Capability) and Exhibit W (Facility Retirement and Site Restoration. ASC Exhibit E (Permits
11 Required for Construction and Operation) identify permits that may be required for
12 construction and operation, to be secured by either the applicant or its third-party (e.g.,
13 contractor, landowner, etc). These exhibits were relied upon in the findings of fact and analysis
14 presented below.

15
16 **Findings of Fact**

17
18 *Applicant's Relevant Experience in Design, Construction, Operation and Successful Mitigation*
19

20 Nolin Hills Wind, LLC is a project-specific LLC without prior experience. Capital Power
21 Corporation, as the parent company to the LLC, is the entity that will fund the construction,
22 operation and retirement of the facility. Capital Power Corporation owns 15 operational, wind
23 and solar energy projects in North America (eight in the United States, and seven in Canada),
24 ranging from 15 MW – 201.6 MW, totaling 1,441.6 MWs).⁸⁸ Capital Power Corporation has
25 been a corporation since 1896 and is a publicly traded company on the Toronto Stock Exchange,
26 with shareholders and over 870 employee in Canada and the US. Capital Power Corporation has
27 a Standard & Poor (or S&P) "investment rating" which is only given to companies considered
28 financially solid – the investment rating is BBB- (which is the lowest grade before considered
29 higher risk, but nonetheless it is a rating that demonstrates of level of financial stability.⁸⁹
30

31 Capital Power Corporation's Senior Vice President and Chief Legal, Development and
32 Commercial Officer Christopher Kopecky that Capital Power "stands behind" the project and
33 has "committed to providing the financial assurance outlined in Exhibit M of the Application
34 and the human capital and expertise outlined in Exhibit D.". The statement also affirmed that
35 "Capital Power has the financial wherewithal and expertise to develop, construct, own and
36 operate the Project."⁹⁰
37

⁸⁸ NHWAPPD2-3 ASC Exhibit D. Org Expertise_2022-01-31 Page 6 of 18, Table D-1.

⁸⁹ NHWAPPD5-2 DPO Public Hearing Transcript 2022-05-26. Testimony of Matt Martin. NHWAPPD4-1 DPO Comments Applicant Powerpoint 2022-05-26.

⁹⁰ NHWAPPD4-5 DPO Applicant Responses to Comments Org Expertise Vice Pres Letter 2022-06-24.

1 The above-referenced letter provides a level of assurance but is not legally binding and does
2 not address Capital Power's ability to support the approximately \$30 million retirement phase
3 of the facility. Therefore, the Council adopts the following condition:⁹¹

4
5 **Organizational Expertise Condition 1 (PRE):** Prior to construction, the certificate holder
6 shall submit to the Department a guarantee signed by its parent company guaranteeing
7 payment and performance of the certificate holder's obligations under the site
8 certificate using the form:

- 9 a. Provided in Final Order on ASC Attachment F; or
10 b. Substantially similar to Final Order on ASC Attachment F, if approved by the
11 Department in consultation with the Department's legal counsel at the Oregon
12 Department of Justice.

13 [PRE-OE-01]

14
15 Most individual projects previously developed by the applicant's parent company are
16 significantly smaller than the facility. Capital Power facilities of comparable size to the facility
17 include, when considered together, Whitla Wind 1, 2 and 3. Whitla Wind 1, 2 and 3 are
18 adjacent, operational wind facilities with a combined capacity of 344.6 MW, under the
19 jurisdiction of the Alberta Utilities Commission (AUC). AUC and EFSC have similar regulatory
20 requirements. AUC imposes Environmental Protection Guidelines requiring adherence to:
21 construction scheduling/timing to minimize environmental impacts and interference with
22 landowners' activities; minimization of soil loss and degradation; minimization of aesthetic
23 impacts from facility components; soil salvage and storage; minimization of water-course
24 crossings and water quality impacts; revegetation and reclamation; and decommissioning
25 requirements.⁹² These requirements are substantively similar to the Council's Soil Protection,
26 Land Use, and Retirement and Financial Assurance standards; and Removal-Fill Law and Water
27 Rights.

28
29 Capital Power's mitigation experience includes a wind facility curtailment protocol for
30 whooping cranes and bird and bat fatality studies.⁹³ Capital Power does not have specific
31 experience implementing revegetation, habitat restoration, or in-kind mitigation projects in
32 Oregon and will retain and rely on the expertise of experienced contractors such as Tetra Tech
33 and Northwest Wildlife Consultants (NWC) to implement mitigation projects.⁹⁴ As such, the
34 Council relies upon the qualifications of the applicant's key management personnel and its
35 selection process and experience for hiring qualified contractors to complete successful
36 mitigation, as presented below.

37

⁹¹ The analysis and condition were direct by Council to staff during Council's June 24, 2022 review of the DPO.

⁹² Alberta Utilities Commission (<https://www.auc.ab.ca/environment-wildlife-and-noise/>) Accessed by the
Department on March 17, 2022.

⁹³ NHWAPPDoc2-3 ASC Exhibit D. Org Expertise_2022-01-31. Pages 15-17 of 18.

⁹⁴ *Id.*

1 Management personnel include 3 individuals employed with Capital Power for over 7 years.
2 Wind and solar energy and business development personnel include 4 individuals each with
3 over 10 years of experience in renewable energy facility permitting and development and have
4 bachelor's or master's degrees of Science and Business Administration. Construction and
5 engineering personnel include 5 individuals each with over 15 years of experience in renewable
6 energy facility construction and have Bachelor of Science or Engineering degrees.⁹⁵ Permitting
7 personnel include 2 individuals with over 20 years of experience in energy facility permitting
8 and compliance and have bachelor's or master's degrees of Science and Environmental Science.
9 Regulatory and government personnel include 2 individuals with bachelor's degrees in political
10 science and law. Based on these facts, the Council finds that Capital Power employs qualified
11 individuals, with relevant educational and professional experience.

12
13 To ensure compliance with the Organizational Expertise standard, the Council imposes the
14 following conditions:
15

16 **Organizational Expertise Condition 2 (PRE):** Prior to construction of the facility, facility
17 component or phase, as applicable, the certificate holder shall notify the Department of
18 the identity, telephone number, email address and qualifications of the full-time, on-site
19 construction manager. Qualifications shall demonstrate that the construction manager
20 has experience in managing permit and regulatory compliance requirements and is
21 qualified to manage a utility-scale energy facility construction project. The notification
22 shall include the construction manager's onsite schedule and shall demonstrate
23 presence onsite during primary (major ground disturbance or activities) construction
24 phases.

25 [PRE-OE-02]
26

27 **Organizational Expertise Condition 3 (PRE):** Prior to construction of the facility, facility
28 component or phase, as applicable, the certificate holder shall provide to the
29 Department the identity and qualifications of the major design, engineering and
30 construction contractor(s). The certificate holder shall select contractors that have
31 substantial experience in the design, engineering and construction of similar facilities
32 and a demonstrated low rate of job incidence and injury rates. The certificate holder
33 shall report to the Department any changes of major contractors.

34 [PRE-OE-03]
35

36 **Organizational Expertise Condition 4 (CON):** During construction, the on-site
37 construction manager must be onsite or have identified an equivalent representative to
38 be onsite during primary (major ground disturbance or activities) construction phases.
39 The certificate holder shall notify the Department within 72-hours upon any change in
40 personnel or contact information for onsite managers.

41 [CON-OE-01]
42

⁹⁵ NHWAPPDoc2-3 ASC Exhibit D. Org Expertise 2022-01-31 Page 6 of 18, Table D-1.

Organizational Expertise Condition 5 (PRO): Before operation, the certificate holder shall notify the Department of the identity, telephone number, e-mail address and qualifications of the facility manager(s). Qualifications shall demonstrate that the facility manager has experience in managing permit and regulatory compliance requirements and is qualified to manage operation of a utility-scale energy facility.

[PRO-OE-01]

Organizational Expertise Condition 6 (OPR): During operation, the facility manager(s) must be onsite or have identified an equivalent representative to be onsite, as is necessary to safely operate the facility.

[OPR-OE-01]

Capital Power has not received any citations during operation of its U.S.-based wind energy facilities; for projects it has constructed, none of its contractors received any regulatory citations. The Council evaluated the AUC website for compliance and enforcement actions against Capital Power and affirms that there are no cited or pending actions. Based on the applicant's parent company experience and regulatory compliance history, and compliance with the above-recommended conditions, the Council finds that the applicant has demonstrated an ability to design, construct, operate and retire the facility in compliance with site certificate conditions and applicable requirements.

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

The applicant's ability to restore the site to a useful, non-hazardous condition following cessations of construction or operation is evaluated in Section IV.G, *Retirement and Financial Assurance* of this order, which is incorporated by reference to this section. As presented in Section IV.G, the Council finds that the applicant has the ability to restore the site to a useful, non-hazardous condition because it has adequately identified the tasks and actions necessary, and evaluated a cost for decommissioning and restoration that the Council finds to be satisfactory and has provided evidence of a reasonable likelihood of obtaining a bond or letter of credit in that amount.

Design, Construct and Operate the Proposed Facility in a Manner that Would Protect Public Health and Safety

Public health and safety impacts from the facility include unanticipated fire and electrical hazards. The Council's findings of fact, reasoning and analysis related to fire are presented in Section IV.M.8. *Public Services - Fire Protection* of this order, which are incorporated by reference to this section.

Specific risks from the battery energy storage system (BESS) include transportation of the lithium-ion batteries and any associated battery waste, and onsite handling and storage of battery related materials and waste. The transportation of lithium-ion batteries is subject to 49

Code of Federal Regulations (CFR) 173.185 – Department of Transportation Pipeline and Hazardous Material Administration which is discussed which is further discussed in Sections IV.M. *Public Services – Fire Protection* and IV.N. *Waste Minimization* of this order.

The wind turbine components could result in health and safety risks from blade failure, structural and reliability concerns, ice throw, proximity to turbine blades by public and private providers of air transportation including aerial sprayers, and risks to public providers of fire service during tower rescue events. The Council’s findings of fact, reasoning and analysis for these issues are presented in Section IV.M.8. *Public Services* and Section IV.P.3. *Public Health and Safety Standards for Wind Facilities*, which are incorporated by reference to this section.

Based on the findings of fact, reasoning and analysis, and compliance with conditions, as presented in IV.M.4. *Public Services – Solid Waste Management*, Section IV.M.8. *Public Services – Fire Protection*, IV.N. *Waste Minimization* and Section IV.P.3. *Public Health and Safety Standards for Wind Facilities* of this order, the Council finds that the applicant has the ability to design, construct and operate the facility in a manner that will protect public health and safety.

ISO 9000 or ISO 14000 Certified Program

OAR 345-022-0010(2) is not applicable to the evaluation because the applicant has not proposed to design, construct or operate the facility according to an International Organization for Standardization (ISO) 9000 or ISO 14000 certified program.⁹⁶

Third-Party Permits

OAR 345-022-0010(3) addresses requirements for potential third-party permits. The standard requires that prior to issuing a site certificate, the Council must find that, for any third-party permits or approval for which Council would ordinarily determine compliance, the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with any third parties.

The applicant will rely on the applicable construction contractor to obtain the following permits and approvals:

- Onsite mobile batch plants: DEQ-issued Air Contaminant Discharge Permit, NPDES 1200-A, WPCF-1000 and Umatilla County land use approval/zoning permit
- Onsite rock quarry: Umatilla County land use approval, zoning permit and comprehensive plan amendment; DOGAMI permit and WPCF-1000
- Crane and construction materials movement: ODOT Oversize Load Movement Permit and Umatilla County Road Access Permit
- O&M building onsite sewage disposal: DEQ-issued onsite sewage disposal construction-installation permit

⁹⁶ NHWAPPDoc2-3 ASC Exhibit D. Org Expertise_2022-01-31. Page 15 of 18.

The facts presented above, including those related to Capital Power’s experience in constructing and operating renewable energy facilities, its contractor selection process and experience and qualifications of key personnel, provide evidence to support Council’s findings that the applicant and its potential third-party contractors have a reasonable likelihood of obtaining the above-referenced permits. Based on the above reasoning and pursuant to OAR 345-022-0010(4), the Council imposes the following condition:

Organizational Expertise Condition 7 (PRE): Prior to construction of the facility, facility component or phase as applicable, the certificate holder shall:

- a. Obtain and provide copies of all third-party permits needed.
- b. Provide proof of agreements between the certificate holder and the third-party regarding access to the resources or services secured by the permits or approvals identified per sub(a) above.

[PRE-OE-04]

As discussed in section III.A.1. *Energy Facility* of this order, the applicant proposes a 230 kV transmission line to interconnect the facility to the regional electric grid and has requested approval by EFSC for two potential transmission line routes - the UEC Cottonwood Route or the BPA Stanfield Route. If the UEC Cottonwood Route is selected, applicant identified that the transmission line will be built, owned and operated by a third-party (UEC). The applicant has not proposed to rely on any third-party permits for the construction and operation of the UEC Cottonwood Route; however, because the applicant has identified a third-party as sharing construction and ownership responsibility for a related or supporting facility of an EFSC-jurisdictional facility, the Council imposes the following condition to require that, prior to construction, the applicant demonstrate that a contractual agreement of shared responsibility for compliance with all applicable site certificate requirements is secured:

Organizational Expertise Condition 8 (PRE): Before beginning construction of the 230 kV UEC Cottonwood Transmission Line, if selected at final design, the certificate holder must provide evidence to the Department that an executed contract with UEC has been obtained, which binds the certificate holder and UEC to the terms and conditions of the site certificate, as applicable to the transmission line, for the life of the transmission line.

[PRE-OE-05]

Conclusions of Law

Based on the evidence in the record, findings of fact, reasoning and analysis, and subject to compliance with conditions of approval, the Council finds that the applicant will satisfy the requirements of 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 seismic hazard risk of the site;*

8
9 *(b) The applicant can design, engineer, and construct the facility to avoid dangers to*
10 *human safety and the environment presented by seismic hazards affecting the site,*
11 *as identified in subsection (1)(a);*

12
13 *(c) The applicant, through appropriate site-specific study, has adequately*
14 *characterized the potential geological and soils hazards of the site and its vicinity*
15 *that could, in the absence of a seismic event, adversely affect, or be aggravated by,*
16 *the construction and operation of the proposed facility; and*

17
18 *(d) The applicant can design, engineer and construct the facility to avoid dangers to*
19 *human safety and the environment presented by the hazards identified in subsection*
20 *(c).*

21
22 *(2) The Council may not impose the Structural Standard in section (1) to approve or deny*
23 *an application for an energy facility that would produce power from wind, solar or*
24 *geothermal energy. However, the Council may, to the extent it determines appropriate,*
25 *apply the requirements of section (1) to impose conditions on a site certificate issued for*
26 *such a facility.*

27
28 *(3) The Council may not impose the Structural Standard in section (1) to deny an*
29 *application for a special criteria facility under OAR 345-015-0310. However, the Council*
30 *may, to the extent it determines appropriate, apply the requirements of section (1) to*
31 *impose conditions on a site certificate issued for such a facility.*

32
33 As provided in section (1) above, the Structural Standard generally requires the Council to
34 evaluate whether the applicant has adequately characterized the potential seismic, geological
35 and soil hazards of the site, and whether the applicant can design, engineer and construct the
36 facility to avoid dangers to human safety and the environment from these hazards.⁹⁷ Pursuant
37 to OAR 345-022-0020(2), the Council may not impose the Structural Standard in OAR 345-022-
38 0020(1) to approve or deny application for a solar energy facility; however, the Council may
39 apply the requirements of the standard to impose site certificate conditions. Under the
40 mandatory condition in OAR 345-027-0020(12), the certificate holder must design, engineer
41 and construct the facility to avoid dangers to human safety and the environment presented by

⁹⁷ OAR 345-022-0020(3) does not apply to this proposed facility because the facility is not a special criteria facility under OAR 345-015-0310.

1 seismic hazards affecting the site that are expected to result from all maximum probable
2 seismic events.⁹⁸

3
4 As established in the Amended Project Order, the analysis area for the Structural Standard is
5 the area within the site boundary. “Site boundary,” as defined in OAR 345-001-0010(55), is the
6 area within the perimeter of the facility, its related or supporting facilities, all temporary
7 laydown and staging areas, and all micro-siting corridors proposed by the applicant.”

8 9 **Findings of Fact**

10
11 Potential seismic hazards at the facility site include seismic shaking or ground motion, fault
12 rupture, liquefaction, seismically induced landslides, and subsidence. The methods used to
13 evaluate these potential hazards included review of topographic and geologic maps, aerial
14 photographs, existing geologic reports, and data provided by Department of Geology and
15 Mineral Industries (DOGAMI), and the U.S. Geological Survey (USGS).⁹⁹ Additionally, the seismic
16 hazards evaluation incorporated code-based seismic parameters from the International
17 Building Code (IBC) 2015, the Oregon Structural Specialty Code (OSSC), and American Society of
18 Civil Engineering (ASCE) 7-10 were used to evaluate potential hazards. Using code-based
19 seismic parameters to inform the seismic hazard analysis was discussed with DOGAMI
20 Geotechnical Engineer Yumei Wang on August 24, 2018. Because the methods were discussed
21 with DOGAMI, they apply requirements of established building and design codes, and are from
22 reasonably available sources, the Council finds that they are adequate for evaluating seismic
23 hazards at the site.¹⁰⁰ As described throughout this section, the applicant represents that it will
24 conduct a preconstruction, site-specific geotechnical assessment to inform final design and
25 siting – and affirms that they will rely on the most current codes at the time for the
26 assessment.¹⁰¹

27 28 *Potential Seismic Risks*

29 30 **Seismic Shaking or Ground Motion**

31
32 There are four sources of earthquakes and seismic activity within the region of the facility.
33 These earthquake sources could result in seismic shaking or ground motion at the site – and
34 include the crustal, intraplate, volcanic, and the deep subduction zone. There are no known or
35 active faults within the site boundary, although there are active faults near the site boundary.
36 Based on the earthquake sources and using USGS’s Seismic Hazard Mapping project, the site
37 boundary has a 2 percent probability of exceedance in 50 years (or a 2,475-year return period),

⁹⁸ The Council does not preempt the jurisdiction of any state or local government over matters related to building code compliance.

⁹⁹ NHWAPPDoc2-7 ASC Exhibit H Geological Soil Stability. _2022-01-31. Page 14 of 77. Predicted ground motions were obtained from a probabilistic seismic hazard analysis from the USGS Seismic Hazard Mapping project.

¹⁰⁰ NHWAPPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31 Page 32-47 of 77.

¹⁰¹ OAR 345-021-0010(1)(h) requires that ASC Exhibit H rely on “reasonably available sources” regarding the geological and soil stability within the analysis area.

1 with peak ground acceleration of 0.0898 acceleration from gravity (g) at the bedrock surface.¹⁰²
2 These results were used to inform preliminary foundation design requirements of facility
3 structures.

4
5 Seismic design parameters were developed for the facility in accordance with the International
6 Building Code (IBC 2015) (ASC Exhibit H Table H-1). The facility will be designed, engineered,
7 and constructed in accordance with the current version of the IBC, OSSC, buildings codes and
8 ASCE-7 standard adopted by the State of Oregon at the time of construction. The facility will be
9 designed for a Site Class D (stiff soil Profile); although shallow bedrock may exist at certain
10 locations where a Site Class C would apply. A preconstruction site-specific analysis will be
11 conducted to provide the structural engineer with site-specific foundation loads and
12 requirements, which will address the potential for seismic shaking or ground motion, prior to
13 construction.

14
15 The Department's consultant, a Professional Engineer from Hart-Crowser, DOGAMI and the
16 applicant¹⁰³ identified that the preconstruction, site-specific geotechnical investigation should
17 be designed to provide suitable subsurface information for determining Site Class; ensure that
18 current code and design standards are used; and those Quaternary faults be considered active
19 and included in the site-specific hazard analysis. Therefore, the Council imposes the following
20 condition, requiring that the applicant complete a preconstruction, site-specific geotechnical
21 investigation for both seismic and nonseismic hazards at the site. The investigation should be
22 based on a protocol reviewed by the Department, in consultation with a third-party consultant
23 or DOGAMI. A draft protocol, referenced in the below-condition, with the specific
24 recommendations is included in Attachment E of this order.

25
26 **Structural Standard Condition 1 (PRE):** Prior to construction of the facility, facility
27 component or phase, as applicable, the certificate holder shall:

- 28 a. Submit a protocol for the site-specific geotechnical investigation of the analysis area
29 to the Department, for review in consultation with a third-party consultant or
30 DOGAMI. The protocol shall, at a minimum, be consistent with Attachment E of the
31 Final Order on the ASC.
- 32 b. Employ a certified Professional Engineer or Geologist to conduct a site-specific
33 geotechnical investigation and prepare a report consistent with the Oregon State
34 Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports,
35 or newer guidelines if available to be submitted to the Department, for review in
36 consultation with a third-party consultant or DOGAMI.
- 37 c. Submit a copy of a final site-specific Geotechnical Investigation Report addressing
38 (a)-(c) to the Department, for review and approval, consultation with a third-party
39 consultant or DOGAMI.

40 [PRE-SS-01]
41

¹⁰² NHWAPPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31. Page 14 of 77.

¹⁰³ NHWAPPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31. Page 35 of 77.

1 Based on review of the hazards and compliance with the above-referenced condition, the
2 Council finds that the facility can be designed, constructed and operated to minimize risk to
3 public health and safety from seismic shaking and ground motion.

4 5 Fault Rupture

6
7 Fault rupture is a potential seismic hazard to facility structures. However, ASC Exhibit H Figure
8 H-2 “Historical Seismicity and Potentially Active Faults” includes mapping of “Undifferentiated
9 Quaternary Faults” and demonstrates that there are no mapped Undifferentiated Quaternary
10 Faults within the site boundary. A desktop review of topographic and geologic maps, aerial
11 photographs, and existing geologic reports identified that there are no apparent faults in the
12 site boundary. The applicant states that if they identify any faults during their site-specific
13 geotechnical investigation, these identified faults will inform the final design and layout of the
14 facility. Faults will be evaluated using high-resolution imagery, Light Detecting and Ranging
15 (LiDAR), or best available data, consistent with DOGAMI special papers #42, #45 and #48.¹⁰⁴ The
16 Council requires that the applicant’s preconstruction, site-specific geotechnical investigation be
17 consistent with these representations. A draft protocol with this recommendation is included in
18 Attachment E of this order. This protocol will be finalized and adhered to by the applicant under
19 the requirements of Structural Standard Condition 1.

20
21 Based on review of the hazards and compliance with Structural Standard Condition 1, the
22 Council finds that the facility can be designed, constructed, and operated to minimize risk to
23 public health and safety from fault rupture.

24 25 Liquefaction

26
27 Liquefaction is a potential seismic hazard to facility structures. When liquefaction occurs,
28 cohesionless soils may experience strength loss, which may lead to ground settlement and
29 deformation. The applicant states that the soils within the microanalysis area are not saturated
30 due to deep groundwater depth. The applicant discussed groundwater depth in ASC Exhibit H
31 Section 3.2, describing that no data were available for the majority of the analysis area, but that
32 groundwater ranged from 9 to 61 feet below the ground surface in the northern part of the site
33 boundary and 230 to 612 feet below ground surface in the southernmost part of the site
34 boundary. Additionally, the applicant states that the soils within the analysis area appear to “be
35 generally cohesive in nature.” However, in ASC Exhibit I, the applicant presents soil data and
36 then in ASC Exhibit H Section 8.5, “Shrinking and Swelling Soils,” the applicant explains that
37 clayey soils are not anticipated along the majority of the micrositing corridor. The applicant
38 states that the liquefaction of soils within the analysis area is very unlikely and do not include a
39 discussion for addressing liquefaction during the site-specific geotechnical investigation.

40
41 The applicant’s descriptions of groundwater and soil conditions are not consistent with their
42 conclusions. There are also mapped Waters of the State throughout the analysis area where

¹⁰⁴ NHWAPPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31. Page 35 of 77.

1 isolated higher groundwater may be present. For these reasons, the Council requires that the
2 protocol (Attachment E of this order) for the applicant's preconstruction, site-specific
3 geotechnical investigation address liquefaction hazards, including characterizing site-specific
4 groundwater and soil conditions that may indicate a liquefaction hazard, as well as a discussion
5 of how they plan to minimize the liquefaction hazard, if a liquefaction hazard is present.
6

7 Based on review of the hazards and compliance with Structural Standard Condition 1, the
8 Council finds that the facility can be designed, constructed and operated to minimize risk to
9 public health and safety from liquefaction.
10

11 Seismically Induced Landslides

12

13 Seismically induced landslides are a potential seismic hazard to facility structures. Through
14 desktop review of landslides and geologic reconnaissance of the site, there are no apparent
15 landslides in the analysis area ASC Figure H-1 "Geological Map" which includes mapping of
16 existing landslides and demonstrates that there are no mapped landslides in the analysis area.
17 Major topographic features are controlled by the structure of the Columbia River basalt. If
18 landslide or slope stability issues are identified during the preconstruction, site-specific
19 geotechnical investigation, final design and layout of the facility will be designed to avoid these
20 areas, or slope stability remediation will be completed. To ensure that slope instability hazards
21 are adequately addressed and used to inform final design and structure foundations, the
22 Council requires that the protocol under Structural Standard Condition 1 require that the
23 preconstruction, site-specific geotechnical investigation identify and describe current
24 topographic features; identify and refine the topographic conditions that may be relevant for
25 slope instability; and address seismically induced landslide hazard.
26

27 Based on review of the hazards and compliance with Structural Standard Condition 1, the
28 Council finds that the facility can be designed, constructed, and operated to minimize risk to
29 public health and safety from seismically induced landslides.
30

31 Subsidence

32

33 Subsidence is a potential seismic hazard to facility structures. Subsidence is the sudden sinking
34 or the gradual downward settling of the land surface. Various factors may contribute to
35 subsidence, including tectonic movements. Subsidence is identified as a potential seismic
36 hazard but the non-seismic related causes for subsidence has not been provided in the ASC.
37 Therefore, the Council requires that the protocol under Structural Standard Condition 1 require
38 that the preconstruction, site specific geotechnical investigation require an evaluation of risks
39 from non-seismic and seismically induced subsidence.
40

41 Based on review of the hazards and compliance with Structural Standard Condition 1, the
42 Council finds that the facility can be designed, constructed, and operated to minimize risk to
43 public health and safety from subsidence.
44

Potential Non-Seismic Risks

Non-seismic hazards within the analysis area include landslides, volcanic activity, erosion, flooding, shrinking and swelling soils, and collapsing soils. Non-seismic hazards were evaluated by the applicant by review of topographic and geologic maps, aerial photographs, existing geologic reports, and data provided by DOGAMI, the Oregon Water Resources Department, the U.S. Geological Survey (USGS), the Natural Resources Conservation Service (NRCS) web-based soil survey, and Federal Emergency Management Agency (FEMA) mapping. These methods were discussed with DOGAMI and are from reasonably available sources; therefore, the Council finds that they are adequate for evaluating non-seismic hazards at the site.¹⁰⁵

Landslides

Landslides are a potential non-seismic hazard to facility structures. ASC Exhibit H Figure H-1 “Geological Map” maps existing landslides, where none are present within the analysis area. Major features are controlled by the structure of the Columbia River basalt. The applicant states that if they identify any landslides during their site-specific geotechnical investigation, these identified landslides will inform the final design and layout of the facility. Landslides will be evaluated using high-resolution imagery, LiDAR or best available data, consistent with DOGAMI special papers #42, #45 and #48.¹⁰⁶ Therefore, the Council requires that the protocol under Structural Standard Condition 1 require that the applicant’s preconstruction, site-specific geotechnical investigation be consistent with these representations.

Based on review of the hazards and compliance with Structural Standard Condition 1, the Council finds that the facility can be designed, constructed, and operated to minimize risk to public health and safety from non-seismic landslides.

Volcanic Activity

Volcanic activity is a potential non-seismic hazard to facility structures, however, the closest volcano is Mt. Adams. Volcanic activity is present in the Cascade Range; the closest volcano is Mt. Adams is approximately 120 miles northwest of the site boundary. The analysis area is outside of a 50-mile radius of potentially erupting volcanoes and not near any streams likely to be subject to pyroclastic flows. Volcanic ash fallout is the main volcanic activity that could impact the site boundary. If a volcanic eruption were to occur, construction activities could be temporarily shut down or, if during operation, the turbines will be shut down until safe operating conditions return. Based on the distance from the nearest volcano, and the safety measures that will be implemented in the event of a volcanic eruption that could impact the site, the Council finds that the facility can be designed, constructed, and operated to minimize risk to public health and safety from volcanic activity.

¹⁰⁵ NHWAPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31. Pages 32-47 of 77.

¹⁰⁶ NHWAPDoc2-7 ASC Exhibit H Geological Soil Stability_2022-01-31. Page 35 of 77.

Erosion

Wind and water erosion are potential non-seismic hazards within the analysis area. Wind and water erosion present hazards including site instability, excessive dust and run-off to adjacent lands outside the site boundary. ASC Exhibit I presents the major soil types within the site boundary, based on 2016 Natural Resources Conservation Service's (NRCS) web-based soil survey. The results of the NRCS web-based soil survey are presented in ASC Exhibit I Table I-1 and Figure I-1 and demonstrate that soil erosion potential within the facility site boundary ranges from slight to severe. Based on review of ASC Exhibit I Table I-1 and Figure I-1, wind and water erosion, if uncontrolled, could result in a significant adverse impact.

To minimize potential wind and water erosion at the site during construction, best management practices (BMPs) and requirements of a DEQ-issued 1200-C National Pollutant Discharge Elimination System Permit (NPDES) would be adhered to. ASC Exhibit I includes an Erosion Sediment Control Plan (ESCP) which gives a variety of example BMPs intended to minimize the potential for wind or water erosion as well as sedimentation of any disturbed soils. The ESCP will be updated for the specific design conditions at individual turbine sites and additional BMPs should be added as necessary, upon issuance of a permit from DEQ.

To minimize wind and water erosion at the site during operation, confining operations to gravel-surfaced areas is important. However, on-going maintenance of erosion-control surfaces and structures is required for their continued performance. Additionally, if any soil disturbance is planned in the future, an ESCP may need to be prepared and NPDES 1200-C construction permit obtained along with any necessary BMPs to minimize soil erosion.

Erosion control and minimization at the facility is further discussed in Section IV.D. *Soil Protection* including conditions. Based on compliance with these conditions, the Council finds that the facility can be designed, constructed, and operated to minimize risk to public health and safety from erosion.

Flooding

Flooding is a potential non-seismic hazard at the facility site. ASC Exhibit H Figure H-3 "Special Flood Hazard Area," includes mapping of FEMA Floodways and 500-year flood zones. The ASC Exhibit H Figure H-3 map shows that the planned transmission line to the BPA Stanfield Substation will cross both a FEMA floodway and 500-year flood zone. The applicant stated that this transmission line will span these zones, thus avoiding any flooding impacts.

Seasonal thunderstorms could result in localized runoff and flooding. Potential areas where localized runoff or flooding may occur were not identified. Therefore, the Council requires that the protocol under Structural Standard Condition 1, require that the preconstruction, site-specific geotechnical investigation include an evaluation of flood risk, based on topography and Oregon's Statewide Wetlands Inventory, to inform civil design (e.g., grading plans).

1 Based on review of the hazards and compliance with Structural Standard Condition 1, the
2 Council finds that the facility can be designed, constructed, and operated to minimize risk to
3 public health and safety from flooding.

4 5 Shrinking and Swelling Soils 6

7 Shrinking and swelling soils are a potential non-seismic hazard within the analysis area. Hazards
8 from shrinking and swelling soils include damage from settlement or subsidence and from
9 heave or uplift, especially where there is differential ground movement. Shrinking and swelling
10 soils are generally indicative of clayey soils. The applicant explains that clayey soils are not
11 anticipated within the majority of disturbance area. ASC Exhibit I presents the major soil types
12 within the site boundary, based on 2016 Natural Resources Conservation Service's (NRCS) web-
13 based soil survey. The results of the NRCS web-based soil survey are presented in ASC Exhibit I
14 and Figure I-1 and demonstrate that the majority of soil units are silt loam. Additionally, some
15 soil units are identified as sandy loam, stony loam, loamy fine sand, gravelly substratum, and
16 rock outcrop. Based on review of ASC Exhibit I Table I-1 and Figure I-1, the Council agrees that
17 these soil units are generally not considered to be clayey soils.

18
19 To minimize shrinking and swelling soils, shrink-swell potential of the soils will be evaluated
20 during the site-specific geotechnical investigations and laboratory testing and analysis. The
21 applicant did not describe what site-specific investigation technique they intend to use or if
22 there are portions of the site that might have more potential for shrinking or swelling soils.
23 Additionally, the applicant did not describe what kind of laboratory testing and analysis will be
24 used to identify the potential for shrinking or swelling soils. Therefore, the Council requires that
25 the protocol under Structural Standard Condition 1, require that the preconstruction, site-
26 specific geotechnical investigation specify and include laboratory testing and analysis to address
27 shrink-swell potential of soils.

28
29 If shrinking and swelling soils are identified, soil improvement methods will be utilized, such as
30 reworking and compacting onsite soils, over-excavating soils with shrink-swell potential and
31 replacing with compacted structural fill, constructing an impermeable barrier to prevent
32 saturation, or mixing with other soils. The Council requires that these methods be identified in
33 the protocol, under Structural Standard Condition 1, and find that these methods are suitable
34 for minimizing the hazard for shrinking and swelling soils.

35 36 Collapsing Soils 37

38 Collapsing soils are a potential non-seismic hazard at the facility site. Subsurface soil conditions,
39 including presence of loess or collapsing soils, will be identified during the site-specific
40 geotechnical investigation, and evaluated through laboratory testing and analysis. The applicant
41 does not describe what site-specific investigation technique they intend to use or if there are
42 portions of the site that might have more potential for collapsing soils. Additionally, the
43 applicant did not describe what kind of laboratory testing and analysis will be used to identify
44 the potential for collapsing soils. Therefore, the Council requires that the protocol for the

preconstruction, site-specific geotechnical investigation under Structural Standard Condition 1 specify the technique to be used to evaluate collapsing soils and identify laboratory testing and analysis.

If those soils are present, the applicant describes construction techniques to address the collapse potential, such as over-excavating and replacing with structural fill, wetting, and compacting. The Council requires that these methods be identified in the protocol, under Structural Standard Condition 1, and finds that these methods are suitable for minimizing the hazard for collapsing soils.

Based on the findings of fact, reasoning and analysis presented above for both seismic and non-seismic hazards at the facility site, the Council imposes Structural Standard Condition 1 to require that, prior to construction, the applicant finalize a geotechnical investigation protocol, consistent with the draft outline provided in Attachment E of this order, to be reviewed by the Department in consultation with a third-party consultant or DOGAMI and complete a site-specific geotechnical investigation in accordance with the protocol.

In addition, the Council's Mandatory Conditions at OAR 345-025-0006(12) – (14) provide structural related design requirements for which the applicant will be required to comply:

Structural Standard Condition 2 (GEN): The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule "seismic hazard" includes ground shaking, ground failure, landslide, liquefaction triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction.

[GEN-SS-01, Mandatory Condition OAR 345-025-0006(12)]

Structural Standard Condition 3 (GEN): 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 to propose and implement corrective or mitigation actions.

[GEN-SS-02, Mandatory Condition OAR 345-025-0006(13)]

Structural Standard Condition 4 (GEN): The certificate holder shall notify the Department, the State Building Codes Division and the Department of Geology and Mineral Industries promptly if shear zones, artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the site. After the Department receives notice, the Council may require the certificate holder to consult with the Department of Geology and Mineral Industries and the Building Codes Division to propose and implement corrective or mitigation actions.

1 [GEN-SS-03, Mandatory Condition OAR 345-025-0006(14)]

2
3 *Disaster Resiliency*

4
5 To evaluate disaster resiliency, the applicant referenced their experience with current codes
6 and standards, as well as experience with both building energy facilities and designing projects
7 to withstand non-seismic geologic hazards. They note that addressing the seismic and non-
8 seismic hazards in the previous sections supports disaster resiliency. In addition to the
9 referenced code standard, the applicant also references several other standards and protocols,
10 including:

- 11
12
 - The structures exceeding specific height limits have lighting according to FAA standards.
 - Earth turbine and substation and the solar array will be monitored by a Supervisory
14 Control and Data Acquisition system such that the facility will go offline in the event of a
15 disaster.
 - Facility components and elements, such as access roads, that may be damaged during a
17 major storm event will be assessed and repairs made quickly.

18
19 The applicant is a member of the North American Electrical Reliability Corporation and thus
20 follows its standards.

21
22 The applicant has confirmed with Bonneville Power Administration (BPA) that they have system
23 recovery plans for the Stanfield Substation and its associated transmission lines.

24
25 The applicant has confirmed with Umatilla Electric Cooperative (UEC) that they have system
26 recovery plans for the Cottonwood Substation and its associated transmission lines.

27
28 For these reasons, the Council finds that the applicant included steps to increase facility
29 resiliency to a range of natural disasters in facility planning documents including wildfire
30 preparedness, emergency management, emergency response, and emergency
31 communications.

32
33 *Climate Change*

34
35 The applicant's evaluation of climate change is based on a University of Washington study that
36 concluded that for the analysis area the future projection includes greater annual average and
37 summer temperatures, as well as more severe storm events and wildfires. This general
38 assessment of regional climate change impacts is supported by similar conclusions from state
39 and federal agencies, including the Oregon Department of Environmental Quality (ODEQ) and
40 the U.S. Environmental Protection Agency. The US EPA has projected that "over the last
41 century, the average annual temperature in the Northwest has risen by about 1.3°F.
42 Temperatures are projected to increase by approximately 3°F to 10°F by the end of the century,
43 with the largest increases expected in the summer. Precipitation in the region has seen a
44 decline in both the amount of total snowfall and the proportion of precipitation falling as snow.

Declines in snowpack and streamflows have been observed in the Cascades in recent decades. Higher temperatures, changing streamflows, and increases in pests and disease threaten forests, agriculture, and fish populations in the Northwest.¹⁰⁷ Changes in precipitation within the region are resulting in increased drought and wildfire risks. Fire seasons in Oregon are roughly 100 days longer than they were in the 1970s. Longer seasons mean more smoke in Oregon communities. The lengthening of the fire season is largely due to declining mountain snowpack and earlier spring snowmelt.¹⁰⁸ Although humans start most fires, climate-related factors such as hotter temperatures and increasingly severe droughts exacerbate fire risk and severity.

For example, Oregon Department of Environmental Quality is implementing in 2022 the Climate Protection Program for Oregon. The Climate Protection Program aims to:

- Reduce greenhouse gas emissions to address the worsening effects of climate change
- Achieve co-benefits from reductions in other air contaminants
- Enhance public welfare for Oregon communities, particularly environmental justice communities including communities of color, tribal communities, communities experiencing lower incomes, rural communities and coastal communities
- Accelerate the transition from fossil fuels to lower carbon energy sources.¹⁰⁹

The applicant refers to ASC Exhibit H Section 8.0, Disaster Resiliency, as reference for resiliency of the facility against these climate change effects.

As a result of climate change impacts, the power lines in the region are expected to experience more stress, thus the applicant states that the construction and operation of the facility itself provides resilience to the overall energy grid in this part of Oregon. The Council reviewed the information submitted by the applicant, and other sources on climate change impacts and resiliency and concludes that the applicant has accurately described potential climate impacts, that could impact the facility, and has designed the facility to achieve the state's goals on building resiliency in energy resources for the future. Further, the construction of renewable energy facilities in Oregon will assist the state in meeting its objectives of reducing greenhouse emissions and transitioning into a sustainable renewable energy future. For these reasons, the Council finds that the facility will be able to meet the Council's standard for climate change and resiliency.

Conclusions of Law

¹⁰⁷ U.S. EPA. Climate Change Impacts in the Northwest. Available: https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-northwest_.html Date Accessed: 2022-04-12.

¹⁰⁸ Oregon Health Authority. Climate and Health in Oregon. 2020.

¹⁰⁹ Oregon Department of Environmental Quality. Available: <https://www.oregon.gov/deq/ghgp/Pages/Climate-Protection.aspx> Date Accessed: 2022-04-12

1 Based on the foregoing analysis, and in compliance with OAR 345-022-0020, the Council finds,
2 with the conditions listed above, that the facility can be constructed and operated in
3 compliance with the requirements of the Structural Standard.

4 **IV.D. Soil Protection: OAR 345-022-0022**

5
6 *To issue a site certificate, the Council must find that the design, construction and*
7 *operation of the facility, taking into account mitigation, are not likely to result in a*
8 *significant adverse impact to soils including, but not limited to, erosion and chemical*
9 *factors such as salt deposition from cooling towers, land application of liquid effluent,*
10 *and chemical spills.*

11
12 **Findings of Fact**

13
14 The analysis area for the soil protection standard, as established in the Amended Project Order,
15 is the area within the site boundary.

16
17 *Existing Soil Conditions and Land Use*

18
19 Major soil types in the analysis area were identified and mapped using the Natural Resources
20 Conservation Service (NRCS) web-based soil survey, accessed in 2016. There are 52 different
21 soil types within the analysis area and 10 different soil types within the proposed site boundary.

22
23 Soil types within the proposed site boundary include: Burke silt loam in the northwest portion
24 of the proposed site boundary; Ritzville silt loam and Shano silt loam in the northern portion of
25 the proposed site boundary; Cantala silt loam, Condon-Bakeoven complex, Morrow silt loam,
26 and Morrow-Bakeoven complex in the southern portion of the proposed site boundary; Condon
27 silt loam in the eastern and southern portion of the proposed site boundary; and Lickskillet very
28 stony loam and Mikkalo silt loam throughout the proposed site boundary. Eight of these 10 soil
29 types are silt loams with depths ranging from 0.5 feet deep to greater than 7 feet deep with
30 moderate to high permeability on slopes ranging from 1 to 40 percent with erosion hazard
31 ratings from slight to severe.¹¹⁰ Based on review of the NRCS web-based soil survey, accessed in
32 2022¹¹¹, the Department affirms that the identified soils types with the proposed site boundary
33 and analysis area are accurate.

34
35 Current land use within the analysis area is predominately agriculture.

36
37 *Potential Adverse Impacts to Soil*

38
39 *Construction*
40

¹¹⁰ NHWAPDoc2-8 ASC Exhibit I. Soil Conditions_2022-01-31 Page 5-10 of 49.

¹¹¹ US Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Accessed:
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Date Accessed: 2022-04-14.

1 Facility construction could result in adverse impacts to soils from temporary and permanent
2 disturbance, including erosion and compaction, and soil contamination from spills.

3
4 Erosion impacts could occur due to soil disturbance, loss of vegetation, compaction, and
5 changes to surface drainage patterns. To minimize construction-related erosion impacts, the
6 applicant will obtain a National Pollutant Discharge Elimination System (NPDES) 1200-C
7 construction permit and will implement an Erosion and Sediment Control Plan (ESCP). A draft
8 ESCP is provided in ASC Exhibit I Attachment I-1 and will be updated based on final facility
9 design, prior to and during construction. Based on the severity of erosion potential during
10 construction-related activities, the Council requires that the final ESCP require:

- 11 • Placement of mulch and stabilized construction roadways (aka gravel covered roads).
12 Covering large areas with mulch may not always be feasible; alternatively, the Council
13 requires the applicant to apply soil tackifiers for large areas and erosion control blankets
14 or mulch for small areas.
- 15 • Installation of swales and check dams for areas along slopes.
- 16 • Grading plan that minimizes unnecessary disturbance and preserves existing vegetation
17 and is conducted only at time when there is adequate dust control at the site. Adequate
18 dust control shall be informed based on DEQ's Fugitive Dust Control Regulation.¹¹²

19
20 The Council imposes the following condition to ensure the soil erosion impacts are minimized
21 during construction activities:

22
23 **Soil Protection Condition 1 (PRE):** The certificate holder shall:

- 24 a. Prior to construction of roads within the wind facility micro-siting area, consult with
25 the Umatilla County Soil and Water Conservation District, Umatilla County Planning
26 Department and Department on layout and design methods that would minimize
27 impacts to agricultural lands.
- 28 b. Prior to construction, consult with the Department and Oregon Department of
29 Environmental Quality on the Erosion and Sediment Control Plans (ESCP) to be

¹¹² OAR 340-208-0210(1) No person may cause or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but not be limited to the following:

- (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- (b) Application of water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
- (c) Full or partial enclosure of materials stockpiles in cases where application of water or other suitable chemicals are not sufficient to prevent particulate matter from becoming airborne;
- (d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- (e) Adequate containment during sandblasting or other similar operations;
- (f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
- (g) The prompt removal from paved streets of earth or other material that does or may become airborne.

1 included in the application for the National Pollutant Discharge Elimination System
2 Construction Stormwater Discharge (NPDES) General Permit 1200-C. Consultation
3 shall address erosion control measures and identify Best Management Practices
4 (BMPs) such as mulch, soil tackifier, erosion control blankets, gravel, and swales and
5 check dam installation based on site-specific information obtained during the
6 preconstruction, geotechnical investigation, final facility design limits of disturbance,
7 grading plan (see requirements in the Revegetation and Noxious Weed Plan) and
8 seasonal conditions at the time of disturbance.
9 [PRE-SP-01]

10
11 **Soil Protection Condition 2 (GEN):** The certificate holder shall:

- 12 a. During construction, conduct all work in compliance with the NPDES General Permit
13 1200-C, including the monitoring and maintenance of all BMPs.
14 b. Following completion of construction, provide evidence to the Department that the
15 NPDES General Permit 1200-C permit was terminated by DEQ.

16 [GEN-SP-01]
17

18 Facility construction may cause localized soil compaction, which can cause a loss of agricultural
19 productivity, increased erosion, and increased difficulty in revegetation. Applicant asserted that
20 compaction will be minimized through avoiding soil disturbance in wet weather and winter
21 months. However, the Council decided to neither rely on this representation nor require
22 avoidance of construction activities in winter months. Rather, compaction may have significant
23 impacts during construction. To minimize these potential impacts, the Council requires that the
24 applicant be required to consult with landowners prior to and post construction to ensure that
25 ground disturbing activities consider any site-specific concerns from landowners of actively
26 cultivated land, and that decompaction extend a minimum of 12 to 18 inches, or at the depth
27 requested by the landowners, to provide adequate restoration. Restoration and decompaction
28 actions will be implemented under the Revegetation and Noxious Weed Plan, Attachment P-2
29 of this order (see Fish and Wildlife Condition 1).
30

31 The construction schedule and seasonal conditions are uncertain. Therefore, long-term impacts
32 to temporarily disturbed agriculturally productive soils is unknown. The applicant explained
33 that temporarily impacted agriculturally productive soils will be restored to pre-disturbance
34 conditions.¹¹³ To ensure that the applicant can adhere to their own representation, to the
35 extent agreed upon by the affected landowner, the Council requires that the applicant
36 implement a long-term soil monitoring plan, in accordance with ORS 469.410(4), to evaluate
37 and mitigate for topsoil loss and wind/water erosion.
38

39 **Soil Protection Condition 3 (PRO):** Prior to operation, the certificate holder shall
40 develop a Soil Monitoring Plan to evaluate impacts of topsoil loss and erosion during

¹¹³ NHWAPDoc2-15 ASC Exhibit P. Fish and Wildlife 2022-01-31 Pages 562-599 of 619. -01-31. In ASC Exhibit P Attachment P-4, the applicant states that the goals of the revegetation plan, which apply to croplands, are to “restore temporarily disturbed areas to pre-disturbance conditions.”

1 construction activities. The Soil Monitoring Plan shall identify the testing method,
2 evaluative criteria and best management practices/corrective actions to be
3 implemented if the results identify a significant impact to soil productivity.
4 [PRO-SP-01]
5

6 Facility construction could result in soil contamination hazards from onsite use of chemicals.
7 One potential source is from any leakage or spillage of stored oils, fuels or other contaminants;
8 up to 500 gallons of diesel fuel and 200 gallons of gasoline may be kept onsite for fueling of
9 construction equipment. The applicant plans to prepare a draft Spill Prevention, Control, and
10 Countermeasures Plan (SPCC Plan), based on the draft plan included in ASC Exhibit G
11 Attachment G-1, that will outline fueling activity procedures, spill prevention measures, as well
12 as best practices if a release were to occur. The Council requires that the applicant develop and
13 maintain an SPCC during facility construction.
14

15 **Soil Protection Condition 4 (PRE):** Prior to construction, the certificate
16 holder shall submit to the Department a final copy of a Construction Spill Prevention
17 Control and Countermeasures Plan (SPCC Plan), based on the draft SPCC Plan included in
18 Attachment G-1 of the Final Order on the ASC.
19 [PRE-SP-02]
20

21 **Soil Protection Condition 5 (CON):** During construction, the certificate holder shall
22 conduct all work in compliance with the final SPCC Plan.
23 [CON-SP-01]
24

25 *Operations*

26

27 Facility operations could result in erosion and contamination impacts to soils. Erosion impacts
28 will be minimal given that O&M activities will largely occur on permanent access roads. Routine
29 O&M of wind turbines could result in crane walking or new temporary disturbance that could
30 contribute to erosion impacts. The Council requires that an erosion inspection and maintenance
31 program be implemented throughout facility operations, as needed, given the extent of ground
32 disturbance planned for any given year.
33

34 **Soil Protection Condition 6 (OPR):** During operational activities that include ground
35 disturbance, the certificate holder shall ensure that the activities are planned with BMPs
36 and erosion control materials in place, as necessary, and inspected and mitigated until
37 site stabilization is achieved.
38 [OPR-SP-01]
39

40 Facility operations include oil-containing transformers with more than 25,000-gallon capacity.
41 Given the oil-containment capacity of the transformers, secondary containment and an SPCC

are required. The Council imposes a condition to ensure that an operational SPCC is developed and implemented to address potential spill-related incidents during operations.

Soil Protection Condition 7 (PRO): Prior to operation, the certificate holder shall submit to the Department a final copy of an Operational Spill Prevention Control and Countermeasures Plan (SPCC Plan).
[PRO-SP-02]

Soil Protection Condition 8 (OPR): During operations, the certificate holder shall conduct all work in compliance with the final SPCC Plan.
[OPR-SP-02]

Conclusions of Law

Based on the foregoing findings of fact and conclusions of law, and subject to compliance with the site certificate conditions, the Council finds that the facility will comply with the Council's Soil Protection standard.

IV.E. Land Use:

ORS 469.503(4)

To issue a site certificate, the Council shall determine that the preponderance of the evidence on the record supports a conclusion that the facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

OAR 345-022-0030

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

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

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

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

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

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;*

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

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

Findings of Fact

The applicant elected Council determination of compliance with land use goals rather than seeking local land use approval from Umatilla County. The Land Use standard therefore requires the Council to find that the proposed facility complies with local applicable substantive criteria and statewide planning goals adopted by the Land Conservation and Development Commission (LCDC) or take an exception to an applicable goal.¹¹⁴ Compliance with applicable substantive criteria must be demonstrated for proposed facility components based on the appropriate land use category and zone. The proposed facility includes the following land uses and zones:

- Commercial wind power generation facility, Exclusive Farm Use (EFU) zone
 - Up to 112 wind turbines, electrical collection system, O&M building, substation
- Photovoltaic solar power generation facility, EFU zone
 - Up to 1,896 acres of solar PV energy generation components, BESS, and associated roads
- Utility facilities necessary for public service (EFU, Rural tourist commercial zone, agri-business and light industrial zone)
 - 25.3 mile 230 kV UEC Cottonwood transmission line¹¹⁵, EFU, Rural tourist commercial zone (RTC), Agri-Business Zone (AB), Light industrial (LI) zone
 - 5-mile 230 kV BPA Stanfield transmission line¹¹⁶, EFU zone
 - 6.8-mile 230 kV Substation connector line, EFU zone

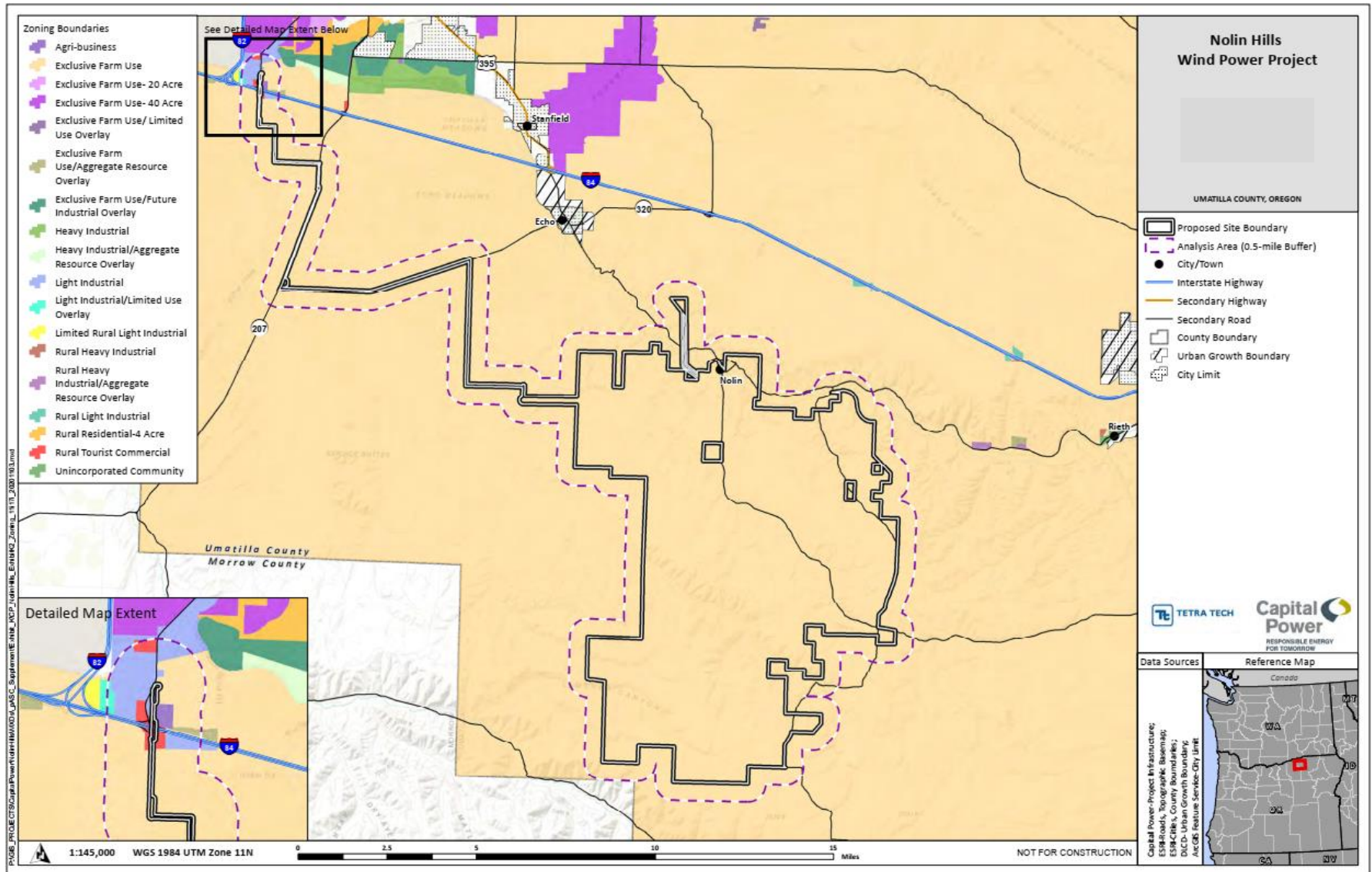
Figure 3: *Land Use Zoning within Analysis Area* are presented below.

¹¹⁴ The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504.

¹¹⁵ The 230 kV UEC Cottonwood transmission line is also evaluated as an “associated transmission line” under ORS 215.274.

¹¹⁶ The 230 kV BPA Stanfield transmission line is also evaluated as an “associated transmission line” under ORS 215.274.

1 Figure 3: Land Use Zoning within Analysis Area



1 IV.E.1. ORS 469.504(1)(b)

2
3 For this ASC, the applicant requested a Council determination under ORS 469.504(1)(b), which
4 requires Council to determine that:

5
6 (A) *The facility complies with applicable substantive criteria from the affected local*
7 *government’s acknowledged comprehensive plan and land use regulations that are*
8 *required by the statewide planning goals and in effect on the date the application is*
9 *submitted and with any Land Conservation and Development Commission administrative*
10 *rules and goals and any land use statutes that apply directly to the facility under ORS*
11 *197.646;*

12
13 (B) *For an energy facility or a related or supporting facility that must be evaluated against*
14 *the applicable substantive criteria pursuant to subsection (5) of this section, that the*
15 *proposed facility does not comply with one or more of the applicable substantive criteria*
16 *but does otherwise comply with the applicable statewide planning goals, or that an*
17 *exception to any applicable statewide planning goal is justified under subsection (2) of*
18 *this section; or*

19
20 (C) *For a facility that the council elects to evaluate against the statewide planning goals*
21 *pursuant to subsection (5) of this section, that the proposed facility complies with the*
22 *applicable statewide goals or that an exception to any applicable statewide planning*
23 *goal is justified under subsection (2) of this section.*

24
25 “Applicable substantive criteria” are criteria from the affected local government’s (here
26 Umatilla County’s) acknowledged comprehensive plan and land use regulations, which then
27 must satisfy two requirements. The criteria within the acknowledged comprehensive plan and
28 land use regulations must 1) be required by the statewide planning goals applicable to the
29 proposed facility based on facility type or facility component and land use zone, and 2) be in
30 effect on the date the applicant submits the preliminary application for site certificate (pASC),
31 which in this instance occurred on February 27, 2020.¹¹⁷

32
33 As explained by the Oregon Supreme Court, Council “may choose to determine compliance
34 with statewide planning goals by evaluating a facility under subparagraph (A) or (B) or (C), but
35 may not combine elements or methods from more than one subparagraph, except to the
36 extent that the chosen subparagraph itself permits.”¹¹⁸ Under the first approach set forth in
37 subparagraph (A) or “complies with applicable substantive criteria,” Council shall find the
38 proposed facility in compliance with the statewide planning goals if it determines the facility
39 complies with applicable substantive criteria from Umatilla County’s comprehensive plan and
40 land use regulations *that are required by statewide planning goals* and in effect on the date the

¹¹⁷ OAR 345-022-0030(3); ORS 469.504(1)(b)(A).

¹¹⁸ *Save Our Rural Oregon v. EFSC*, 339 Or 353, 367 (2005).

1 application is submitted, and with any LCDC administrative rules and goals and land use
2 statutes that apply directly to the facility.

3
4 The second approach, set forth in subparagraph (B), allows for Council to find that an applicant
5 has satisfied the requirements of the Land Use standard even if the proposed facility cannot
6 comply with one or more “applicable substantive criteria.” To find a facility in compliance with
7 statewide planning goals under subparagraph (B), the Council must conclude that the proposed
8 facility otherwise complies with applicable statewide planning goals or demonstrates that an
9 exception to the applicable statewide planning goal is justified.¹¹⁹ Strict compliance with
10 “applicable substantive criteria” is therefore not required if compliance with statewide planning
11 goals is demonstrated or Council finds that an exception is justified.

12
13 The affected local governments include the governing bodies of the jurisdictions for which
14 proposed facility components will be located, which in this instance includes the governing
15 bodies of Umatilla County – Umatilla Board of County Commissioners, appointed as a special
16 advisory group on October 19, 2017.¹²⁰

17
18 Table 3 below provides the applicable substantive criteria recommended by the SAG.
19

Table 3: Umatilla County Development Code (UCDC)

Code Section	Title
Exclusive Farm Use (EFU) Zone Requirements	
Section 152.025	Zoning Permit
Section 152.059	Land use decisions
Section 152.060	Conditional uses permitted
Section 152.061	Standards for all conditional uses
Section 152.615	Additional conditional use permit restrictions
Section 152.616(CCC)	Conditional use criteria for utility facility
Section 152.616(HHH) ¹	Conditional use criteria for commercial wind power generation facility
Section 152.617(II)(7)	Standards for review: EFU and GF zone land use decisions [Utility facility necessary for public service]
Other Zones	
Section 152.283	Conditional uses permitted [in a RTC zone]

¹¹⁹ NHWAPDoc2-10 ASC Exhibit K Land Use 2022-01-31. Pages 20-21 of 158. The Council must apply the Land Use standard in conformance with the requirements of ORS 469.504. The Oregon Supreme Court has held that, “under ORS 469.504(1)(b) and (5), the Council may choose to determine compliance with statewide planning goals by evaluating a facility under paragraph (A) or (B) or (C), but...it may not combine elements or methods from more than one subparagraph, except to the extent that the chosen subparagraph itself permits.” *Save Our Rural Oregon v. Energy Facility Siting Council*, 339 Or. 353, 367 (2005). In this same decision, the Court noted that “ORS 469.504(1)(b)(B) allows a comprehensive inquiry that requires the council to determine compliance with the most specific criteria that it can: local “applicable substantive criteria” if possible, findings of compliance with the statewide planning goals in the alternative; and exceptions to the goals if necessary.” *Id.* at 368-369.

¹²⁰ NHWNOIDoc5 Order Appointing Special Advisory Group 2017-10-19.

Table 3: Umatilla County Development Code (UCDC)

Section 152.292	Conditional uses permitted [in an AB zone]
Section 152.303	Conditional uses permitted [in a LI zone]; General criteria
Umatilla County Comprehensive Plan (UCCP)²	
Chapter 6: Agriculture Policies 1, 8 and 17	
Chapter 5: Citizen Involvement Policies 1 and 5	
Chapter 8: 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 (a), 20(b)(1-8), 22, 23(a), 24(a), 26, 37 & 38(a-c), 39(a) and 42(a)	
Chapter 9: Air, Land, and Water Quality Policies 1, 7 and 8	
Chapter 10: Natural Hazards Policies 1 and 4	
Chapter 11: Recreational Needs Policy 1	
Chapter 12: Economy of the County Policies 1, 4 and 8(a-f)	
Chapter 14: Public Facilities and Services Policies 1(a-d), 2, 9 and 19	
Chapter 15: Transportation Policies 18 and 20	
Chapter 16: Energy Conservation Policy 1	
Notes: <ol style="list-style-type: none">1. In ASC Exhibit K, the applicant asserts that UCDC 152.616(HHH)(6)(a)(3), a two-mile setback between wind turbines and rural residences in EFU-zoned land, is not “applicable substantive criteria”, or in the alternative, proposes that the facility will otherwise comply with statewide planning goals, which is an allowable regulatory pathway for satisfying the requirements of the Land Use standard pursuant to ORS 469.504(1)(b)(B) and ORS 469.504(5). This is evaluated in the subsection below.2. Rather than recommend findings on the broad policies and goals articulated in the Comprehensive plan that are not specific to locations, activity or use, the Council makes findings on compliance with the land use ordinance provisions that implement the relevant sections of the Comprehensive Plan. See ORS 197.175(2) and 197.015(11).	

IV.E.1.a UCDC 152.616(HHH)(6)(a)(3) is not an applicable substantive criterion.

As a threshold matter, based on the findings of fact, conclusions of law, and opinion as presented below and in the Contested Case Order, as adopted by Council (Attachment 1 of this order), the Council finds the preponderance of evidence supports a conclusion that UCDC 152.616(HHH)(6)(a)(3) (“Criterion (3)”) does not constitute “applicable substantive criteria” under ORS 469.504(1)(b)(A) or OAR 345-022-0030(3) because the evidence on the record does not demonstrate it is required by any statewide planning goal.

For this proposed facility, the SAG recommended¹²¹ applicable substantive criteria that included the following requirement, referred hereinafter as Criterion (3):

¹²¹ NHWAPDoc3-9 pASC Umatilla County Comment 2021-01-20. NHWAPDoc3-9 pASC Umatilla County Comment 2021-01-20. On November 6, 2017, the SAG commented on the NOI and provided a list of relevant criteria from the UCDC and County Comprehensive Plan, which included Criterion (3). On April 15, 2020, the SAG commented on

UCDC 152.616(HHH)(6) Standards/Criteria of Approval

The following requirements and restrictions apply to the siting of a Wind Power Generation Facility:

(a) Setbacks. The minimum setback shall be a distance of not less than the following:

** * **

(3) From a turbine tower to a rural residence shall be 2 miles. For purposes of this section, "rural residence" is defined as a legal, existing single family dwelling meeting the standards of §152.058 (F)(1)-(4), or a rural residence not yet in existence but for which a zoning permit has been issued, on a unit of land not a part of the Wind Power Generation Facility, on the date a Wind Power Generation Facility application is submitted. For purposes of this section, the setback does not apply to residences located on properties within the Wind Power Generation Facility project application. The measurement of the setback is from the centerline of the turbine tower to the center point of the rural residence.

Criterion (3), adopted by Umatilla County in 2012, establishes a 2-mile setback from a turbine tower to rural residences, not including residences located on properties that are part of the proposed wind facility. Criterion (3) is intended to mitigate noise and visual impacts to rural residences (supposedly) caused by wind turbines,¹²² and address concerns about wind turbine impacts to residential property values.¹²³

The facility will not comply with this 2-mile setback because approximately 8 proposed wind turbine locations are less than 2 miles from approximately 16 rural residences (see ASC Exhibit K Figure K-9). However, the applicant specifically requested that Council find that Criterion (3) does not meet the Council's definition of "applicable substantive criteria" under OAR 345-022-0030(3) because it is not required by statewide planning goals and therefore is not required to be satisfied to meet ORS 469.503(4) and the Land Use standard; or, in the alternative, that non-compliance with the criterion is allowable per ORS 460.504(1)(b)(B) because the proposed facility otherwise complies with applicable statewide planning goals. Except where the applicant specifically challenged a requirement as nonapplicable, as with Criterion (3), the

the initial pASC and reaffirmed the inclusion of Criterion (3) as part of the applicable substantive criteria and stated that the proposed facility would not comply with Criterion (3). After the applicant submitted a revised application on November 6, 2020 adding solar photovoltaic generation and battery storage to their proposal, the SAG commented on January 20, 2021 that the revised pASC Exhibit K appeared to have provided a comprehensive list of the County's applicable substantive criteria, but noted again that the proposed facility would not comply with Criterion (3).

¹²² NHWAPPDoc3-9 pASC Umatilla County Comment 2021-01-20, Page 1 of 1.

¹²³ NHWAPPDoc13-2 Umatilla County Response to Nolin Hills Wind LLC's MSD 2023-03-21, Page 7 of 132.

1 Council has applied the criteria identified by the SAG as applicable substantive criteria for which
2 the applicant is obligated to comply.¹²⁴

3
4 OAR 345-021-0050(6)(b)(A) states that when an applicant has elected to obtain a Council
5 determination of compliance with the Council's land use standard under ORS 469.504(1)(b),
6 each local government with land use jurisdiction over the proposed facility shall include in their
7 comments or recommendations to the Department "A complete list of applicable substantive
8 criteria from the local government's acknowledged comprehensive plan and land use
9 ordinances *that are required by the statewide planning goals* and that are in effect on the date
10 the application was submitted" (emphasis added). OAR 345-022-0030(3) states "applicable
11 substantive criteria" are "criteria from the affected local government's acknowledged
12 comprehensive plan and land use ordinances *that are required by the statewide planning goals*
13 and that are in effect on the date the applicant submits the application" (emphasis added).
14 Thus, whether recommended criteria from the local comprehensive plan and land use
15 regulations are "applicable substantive criteria" turns on two factors, whether they are
16 "required by the statewide planning goals" and "in effect on the date the application was
17 submitted."

18
19 The preliminary application was submitted on February 27, 2020. Criterion (3) was in effect on
20 the date the application was submitted. That leaves whether or not Criterion (3) is "required by
21 the statewide planning goals."

22
23 Oregon's statewide program for land use planning consists of 19 goals. Each county
24 comprehensive plan and land use regulation that is approved must be consistent with all
25 statewide planning goals. The Oregon Land Conservation and Development Commission (LCDC)
26 conducts the review of county comprehensive plans for consistency. LCDC had the opportunity
27 to evaluate Criterion (3) and did not challenge its consistency with statewide planning goals.
28 However, being consistent with statewide planning goals is not the same as being "required" by
29 them. Therefore, an evaluation of Criterion (3) against statewide planning goals is necessary to
30 determine whether or not it is required.

31
32 The first goal evaluated is Goal 2. Goal 2 requires cities and counties to adopt comprehensive
33 plans and to enact land use regulations to implement those plans. Goal 2 further requires that
34 all comprehensive plans and adopted land use regulations comply with the statewide planning
35 goals. ORS 197.175; 197.250, 215.050. Based on the following analysis and reasoning, and as
36 presented in Council's adopted Contested Case Order (Attachment 1 of this order, pages 28-
37 29), Council finds that Goal 2 does not require that Criterion (3) be adopted.

¹²⁴ In most applications, applicants meet the requirements set forth in the acknowledged comprehensive plan and land use regulations that counties recommend be applied, therefore an assessment of whether or not the recommended criteria constitute applicable substantive criteria is not typically done. Only when an applicant states that their proposed facility would not meet a specific comprehensive plan provision or land use regulation does the Council evaluate whether or not the recommended criterion constitutes applicable substantive criteria.

As described above, Criterion (3) is intended to mitigate noise and visual impacts to rural residences (supposedly) caused by wind turbines,¹²⁵ and address concerns about wind turbine impacts to residential property values.¹²⁶ Goal 2 does not require counties to take measures to preserve property values or protect against noise or visual impacts.

In general, Goal 2 requires local governments in Oregon to establish and follow a comprehensive plan land use plan and implementing regulations and requires state agency “actions related to land use” to be consistent with city and county comprehensive plans.¹²⁷ However, ORS 469.504(6) exempts EFSC from the requirement that state agencies ensure their actions are consistent with local comprehensive plans and regulations and ORS 469.504(7) requires counties to amend their comprehensive plan and land use regulations to reflect the decision of the council pertaining to a site certificate or amended site certificate. Thus, it is the County that must amend its comprehensive plans and regulations to be consistent with the EFSC decision, not vice versa.¹²⁸

Goal 2 does not require EFSC to include Criterion (3) as “applicable substantive criteria” simply because the SAG recommended it.

The next goal evaluated is Goal 3 (Agriculture). In ASC Exhibit K the applicant states “The 2-mile residential setback does not in any way relate to or impact the preservation or protection of agricultural lands or agricultural practices.”¹²⁹ Consistent with the purpose of Goal 3, to protect agricultural lands, the legislature prescribed allowable uses in all Exclusive Farm Use (EFU) zones¹³⁰ and established the requirements for those uses. Counties must include the same uses allowed in statute and must include the same review criteria in their land use regulations. UCDC 152.060 is consistent with this statutory requirement in that it lists “commercial utility facilities for the purpose of generating power for public use by sale...” as a conditional use. Further, ORS 215.283(2) specifically states that all conditional uses in EFU zones must also meet ORS 215.296 - *Standards for approval of certain uses in exclusive farm use zones; violation of standards; complaint; penalties; exceptions to standards.*

- (1) A use allowed under ORS 215.213 (2) or (11) or 215.283 (2) or (4) may be approved only where the local governing body or its designee finds that the use will not:
- (a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or

¹²⁵ NHWAPPD03-9 pASC Umatilla County Comment 2021-01-20, Page 1 of 1.

¹²⁶ NHWAPPD03-2 Umatilla County Response to Nolin Hills Wind LLC’s MSD 2023-03-21, Page 7 of 132.

¹²⁷ OAR 660-015-0000(2).

¹²⁸ NHWAPPD03-17 Umatilla County’s Exceptions to PCCO 2023-06-12, Pages 15-17 of 34. In the exceptions it filed with Council, Umatilla County argued that because Goal 2 requires state “actions related to land use” to be consistent with city and county comprehensive plans, EFSC must conform any site certificate it issues to be consistent with the County’s regulations.

¹²⁹ NHWAPPD02-10 ASC Exhibit K. Land Use_2022-01-31, Page 21 of 158.

¹³⁰ ORS 215.213 & 215.283

1 (b) Significantly increase the cost of accepted farm or forest practices on surrounding
2 lands devoted to farm or forest use.

3 ***

4
5 This statute is an example of an applicable substantive criterion required by Goal 3 because
6 every county is obligated to apply it to every conditional use in their respective Exclusive Farm
7 Use zones. This statute is included verbatim in UCDC 152.061.

8
9 Similar to the legislature, LCDC has the authority to adopt EFU rules that every county must
10 apply consistent with Goal 3. An example of this is OAR 660-033-0130 – *Minimum Standards*
11 *Applicable to the Schedule of Permitted and Conditional Use*. This rule sets out the applicable
12 requirements associated with each conditional use allowed in the EFU zone. The preamble
13 language at the beginning of this rule states:

14
15 *The following requirements apply to uses specified, and as listed in the table adopted by*
16 *OAR 660-033-0120. For each section of this rule, the corresponding section number is shown*
17 *in the table. Where no numerical reference is indicated on the table, this rule does not*
18 *specify any minimum review or approval criteria. **Counties may include procedures and***
19 ***conditions in addition to those listed in the table, as authorized by law (emphasis added).***
20

21 Subsection (37) of this rule provides specific requirements for wind power generation facilities
22 which must be applied by each county. Below is an excerpt from the table in OAR 660-033-0120
23 – Uses Authorized on Agricultural Lands, referenced in the preamble language above related to
24 subsection (37).
25

HV Farmland	All Other	Uses
R5, 37	R5, 37	Wind power generation facilities as commercial utility facilities for the purpose of generating power for public use by sale.

26
27 The “R” in the table above is further described in OAR 660-033-0120:

28
29 *Use may be allowed, after required review. The use requires notice and the opportunity for a*
30 *hearing. Minimum standards for uses in the table that include numerical reference are*
31 *specified in OAR 660-033-0130. **Counties may prescribe additional limitations and***
32 ***requirements to meet local concerns (emphasis added).***
33

34 The “5” in the table above refers to OAR 660-033-0130(5) which reiterates the requirements of
35 ORS 215.296 already described above.

36
37 The “37” in the table above refers to OAR 660-033-0130(37) which, as already described above,
38 establishes the mandatory requirements associated with wind power generation facilities.

39
40 Criterion (3) was adopted by Umatilla County to meet “local concerns”, as allowed by OAR 660-
41 033-0120 and 0130 which is consistent with Goal 3. However, while Criterion (3) may be

1 consistent with Goal 3, it is nevertheless not “required” by Goal 3 because Goal 3 does not
2 require counties to adopt setbacks between wind turbines and residences or take measures to
3 preserve property values or protect against noise or visual impacts. This is further evidenced by
4 the fact that the Council is unaware of any other county that has adopted a similar setback
5 requirement between wind turbines and residences.

6
7 This leaves one question regarding that statutory description of “applicable substantive
8 criteria” as it applies to Goal 3.

9
10 *The facility complies with applicable substantive criteria from the affected local*
11 *government’s acknowledged comprehensive plan and land use regulations that are*
12 *required by the statewide planning goals and in effect on the date the application is*
13 *submitted, and with any Land Conservation and Development Commission*
14 *administrative rules and goals and any land use statutes that apply directly to the*
15 *facility under ORS 197.646 (emphasis added).*

16
17 The emphasized language above ensures that if a county’s comprehensive plan and/or land use
18 regulations have not been amended to include all “required” rules, goals and statutes, the
19 Council must nevertheless apply them directly per ORS 197.646 - *Implementation of New*
20 *requirement in goal, rule or statute; rules*. This means that if a county has adopted all statutes
21 and rules “required” by Goal 3, such as those described above, EFSC will not have to apply any
22 rules, goals or statutes directly. However, if they haven’t, the Council must apply those rules,
23 goals or statutes directly, which is the circumstances for this application. UCDC Section
24 152.616(HHH) Commercial Wind Power Generation Facility does not specifically include the
25 requirements of OAR 660-033-0130(37). Instead, UCDC, Section 152.616(HHH)(7)(k) makes a
26 specific reference to an applicant having to meet the requirements of subsection (37).
27 Therefore, those rule requirements are being evaluated under the Directly Applicable State
28 Laws and Statutes section below.

29
30 In Exhibit K¹³¹ the applicant states:

31 “Where Goal 3 protects agricultural land, Goal 14 provides for an orderly and efficient
32 transition from rural to urban land use. Commercial wind energy facilities are generally not
33 permitted within UGBs or unincorporated community areas that may include more
34 concentrated rural residences but also other community supporting land uses such as
35 commercial development and public uses (including but not limited to schools, churches,
36 grange halls, post offices). As stated above, there will be no turbine towers within 2 miles of
37 a UGB and 1 mile of an unincorporated community, consistent with those setback
38 standards. Interestingly, the setback for rural residences in this standard, which defers to
39 the definition of a rural residence in the EFU zone (UCDC §152.058 (F)(1)-(4)), requires a
40 larger setback (2 miles) than for an unincorporated community (1 mile) which also contains
41 residences, and often a greater density of residences”.

42

131 NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Page 23 of 158.

1 LCDC has adopted numerous rules to implement Goal 14 (Urbanization), which are listed below:

2
3 *OAR 660-011 – Public Facilities Planning*

4 *OAR 660-012 – Transportation Planning*

5 *OAR 660-014 – Newly Incorporated Cities, Annexations, Urban Development on Rural Lands*

6 *OAR 660-021 – Urban Reserves (applies statewide except the Portland Metro area)*

7 *OAR 660-022 – Unincorporated Communities*

8 *OAR 660-024 – Urban Growth Boundaries*

9 *OAR 660-025 – Periodic Review*

10 *OAR 660-027 – Urban and Rural Reserves in the Portland Metro Area*

11 *OAR 660-032 – Population Forecasts*

12 *OAR 660-038 – Simplified Urban Growth Boundary Method*

13
14 None of these rules “require” specific setback distances between wind turbines and rural
15 residences. The Council agrees with the applicant’s conclusion that criterion (3) is also not
16 “required” by Goal 14.

17
18 The Council concludes Umatilla County’s Criterion (3) is not required by any of the other
19 statewide planning goals for these same reasons – none of the goals require counties to adopt
20 setbacks between wind turbines and residences or take measures to preserve property values
21 or protect against noise or visual impacts, which are the only purposes Umatilla County
22 identified as being the reasons for adoption. The Council agrees with the applicant and
23 concludes that Criterion (3) is not “required” by any of the 19 statewide planning goals,
24 therefore it does not constitute applicable substantive criteria.

25
26 In ASC Exhibit K¹³² the applicant requests Council replace the 2-mile setback with a 0.5 mile
27 setback. Council concludes that their authority to evaluate land use is established in in ORS
28 469.504(1)(b), which does not include the authority to alter applicable comprehensive plan and
29 land use regulations, unless specifically described in the development code or zoning
30 ordinance.

31
32 For the reasons set forth above and in Council’s adopted Contested Case Order in Attachment 1
33 of this order, Council finds the preponderance of evidence in the record demonstrates Criterion
34 (3) is not “required” by any of the 19 statewide planning goals, therefore it does not constitute
35 applicable substantive criteria. Because Criterion (3) is not an applicable substantive criterion,
36 Council does not require the applicant to comply with it.

37
38 **IV.E.1.b Umatilla County Development Code**

39
40 For the reasons that follow, pursuant to ORS 469.504(1)(b)(A), Council finds the proposed
41 facility is in compliance with the statewide planning goals because it complies with all
42 applicable substantive criteria from Umatilla County’s acknowledged comprehensive plan and

¹³² NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Page 23 of 158.

land use regulations that are required by the statewide planning goals and in effect on the date the application was submitted. Council analyzes those applicable substantive criteria as follows.

UCDC Section 152.025 Zoning Permit

(A) Prior to the construction, reconstruction, addition to or change of use of a structure, or the change of use of a lot, or the installation or replacement of a mobile home on a lot, a zoning permit shall be obtained from the County Planning Department. An amended zoning permit must be obtained when changes to an approved zoning permit occur. Changes include, but are not limited to, the size of the proposed structure, relocation of a structure or changes in the model year of a proposed manufactured home, etc.

As presented in the subsections below, the land use decision criteria for the 230 kV UEC Cottonwood transmission line, 230 kV BPA Stanfield transmission line, and 230 kV Substation Collector transmission line require that a zoning permit, per tax lot, be obtained from Umatilla County prior to construction of structures. Similarly, the conditional use criteria for the proposed wind and solar facility components require that conditional use and zoning permits, per tax lot, be obtained from Umatilla County.

To ensure that zoning permits are obtained prior to construction of all applicable structures the Council imposes the following condition:

Land Use Condition 1 (PRE): Subject to the Council’s jurisdiction and authority pursuant to ORS 469.504(1), prior to construction of facility structures, as applicable, the certificate holder shall obtain conditional use permits and zoning permits issued by the Planning Director, per affected tax lot, from Umatilla County Planning Department; copies of permits shall be provided to the Department.
[PRE-LU-01]

UCDC Section 152.059 Land Use Decisions

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

(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 or communication towers over 200 feet in height. A utility facility necessary for public service may be established as provided in ORS 215.275 and in § 152.617 (II)(7).

UCDC 152.059(C) establishes that “utility facilities necessary for public service” in EFU zoned land may be permitted through a land use decision, subject to UCDC 152.769 administrative review; and subject to compliance with applicable criteria in ORS 215.275 and UCDC

1 152.617(II)(7).¹³³ UCDC 152.059 also specifies that a zoning permit under UCDC 152.025 is
2 necessary for uses permitted in EFU zoned land.

3
4 The county's land use decision via administrative review process would not apply because it
5 includes procedural review requirements¹³⁴ which are superseded by the EFSC process when an
6 applicant selects land use review under OAR 345-022-0030(2)(b), as is the case for this ASC.

7
8 Facility components considered a "utility facility necessary for public service" within EFU-zoned
9 land include the: proposed 230 kV BPA Stanfield transmission line, portions of the 230 kV UEC
10 Cottonwood transmission line, and the 230 kV substation connector line. **The Council's**
11 **evaluation of applicable substantive criteria is presented below (see evaluation of UCDC**
12 **152.617(II)(7), ORS 215.275 and ORS 215.274). The evaluation of UCDC 152.025, including a**
13 **proposed condition requiring that the applicant obtain zoning permits, is presented in the**
14 **preceding subsection.**

15
16 **UCDC Section 152.060 Conditional Uses Permitted**

17
18 *In an EFU zone the following uses may be permitted conditionally via administrative review*
19 *(§ 152.769), subject to the requirements of this section, the applicable criteria in § 152.061,*
20 *§§ 152.610 through 152.615, 152.617 and §§ 152.545 through 152.562. A zoning permit is*
21 *required following the approval of a conditional use pursuant to §152.025. Existing uses*
22 *classified as conditional uses and listed in this section may be expanded subject to*
23 *administrative review and subject to the requirements listed in OAR 660, Division 033.*

24 ***

25 *(F) Commercial utility facilities for the purpose of generating power for public use by sale as*
26 *provided in § 152.617 (I)(C). (For specific criteria for Wind Power Generation see § 152.617*
27 *(I)(W))*

28 ***

29 *(FF) Photovoltaic solar power generation facility as provided in OAR 660-033-0130(38).*

30
31 UCDC Section 152.060 establishes conditional use requirements for permissible land used
32 within EFU-zoned land, including land uses meeting the definition of a "commercial utility
33 facility for the purpose of generating power for public use by sale" and "photovoltaic solar

¹³³ Notwithstanding the language in the County's code, the requirements beyond those that are consistent with ORS 215.275 are not applicable to the proposed facility because, as a utility facility necessary for public service under ORS 215.283(1), the use is permitted subject only to the requirements of ORS 215.275 and the County cannot impose additional approval criteria. Therefore, any requirements of UCDC 152.617 that do not mirror ORS 215.275 do not apply.

¹³⁴ UCDC 152.769 identifies a future review and approval, based on evaluation and findings of compliance with applicable criteria, by the Planning Department; public notice; and an opportunity for members of the public to request a public hearing. Unless the county has a modified administrative review process, without the procedural requirements under UCDC 152.769, requiring that the applicant obtain a land use decision via Umatilla County's administrative review process would be inconsistent with OAR 469.401(3), which requires local jurisdictions to issue any permits or approvals, subject only to the conditions set forth in the site certificate, without hearings or other proceedings.

power generation facility,” both land use categories applicable to the facility. The land uses are subject to the requirements of UCDC 152.060, UCDC 152.061 and 152.615. A conditional use permit and zoning permits, per taxlot, are also required for these uses – local permits are addressed above and will be required per Land Use Condition 1.

Specific criteria for wind power generation are at UCDC 152.617(I)(W); UCDC 152.617(I)(W) in turn simply refers to UCDC 152.616(HHH), which is addressed later in the Council’s findings of fact. UCDC 152.616(HHH)(k) requires compliance with OAR 660-033-0130(37). The evaluation of compliance with OAR 660-033-0130(37) is presented in Section IV.E.2.a *LCDC Minimum Conditional Use Requirements for Wind Facility at OAR 660-033-0130(37)*.

Under UCDC Section 152.060(F), a solar PV facility may be permitted conditionally in the EFU zone as provided in OAR 660-033-0130(38). The evaluation of compliance with OAR 660-033-0130(38) is presented in Section IV.E.2.b *Directly Applicable State Laws and Statutes*.

UCDC Section 152.061 Conditional Uses Permitted

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

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

As described above, the facility includes two land uses, “wind power generation” and “photovoltaic solar power generation facility,” that require compliance with UCDC 152.061.¹³⁵ Because the impacts to accepted farm and forest practices differ between a wind facility and solar facility, the evaluation is presented separately below.

UCDC 152.061 requires that, in order for a proposed wind and solar PV facility to be sited in EFU zoned land, there be a demonstration that the proposed use will not force a significant change in accepted farm or forest practices, or the cost thereof, on surrounding lands devoted to farm or forest use. ASC Exhibit K Figure K-2 Zoning demonstrates that the proposed wind and solar PV facility components will be located in EFU zoned land within Umatilla County. None of the surrounding lands are devoted to forest use; therefore, the evaluation of the UCDC 152.061 focuses on potential impacts to accepted farm practices, and the cost thereof, on surrounding lands.

The Oregon Land Use Board of Appeals (LUBA) has held that findings related to approval standards that require an analysis of the impact of the proposed use on surrounding properties must identify the relevant area, the decision must identify the uses within the study area that

¹³⁵ UCDC 152.061(A) & (B) are a direct application of ORS 215.296.

might be affected by the proposed use, and the decision must explain why the proposed use will not force a significant change.¹³⁶ Consistent with this outcome, the Council provides the framework of the evaluation of the criteria.

- Surrounding lands: defined as properties that are adjacent and nearby to the proposed microsites areas.
- Uses within the study area that might be affected: Any acceptable farm practices identified by the applicant
- Evaluation of whether proposed use will force a significant change: based on facts and evidence in the record.

Surrounding Lands

Non-participating landowners on surrounding lands include Vicky and Joseph Cadby (0-feet); James Kirkham/Janey Jensen (0-feet); Homer Peterson (approx. 1-mile); Margaret Skillman (approx. 1-mile); and Kent Beebe (approx. 2.5 miles). Participating landowners on surrounding lands include: Pendleton Ranches Inc; Cunningham Sheep Co; Mud Springs Ranches; Buttkle Ranch LLC; Buttkle Ranch Partnership; and Hoke Ranches.¹³⁷

Accepted Farm Practices

On surrounding lands, accepted farm practices include irrigated agriculture, wheat cultivation, livestock grazing and non-cultivated lands (see ASC Exhibit K Figures K-3 and K-5). Practices for dryland wheat farming include terracing or contour plowing, weed control, field preparation, herbicide application, seed bed preparation, fertilization, and seeding or planting of the crop. Of the non-participating landowners on surrounding lands, the Cadby/Kirkham/Jensen property is cultivated for dryland wheat and at time enrolled in Conservation Recovery Program (CRP). The Peterson and Skillman properties are not cultivated.¹³⁸

Potential Impacts to Accepted Farm Practices on Surrounding Lands

Potential impacts to accepted farm practices on surrounding lands include erosion impacts, dust, noxious weeds, traffic congestion, water use and impacts to emergency service providers. In ASC Exhibit K, the applicant represented that it will consult with landowners on facility design and construction methods; and, will ensure that landowners are compensated for loss of agriculturally productive lands. The Council incorporated the applicant's representations into a draft Agricultural Mitigation Plan, provided in Attachment K-1 of this order. The Council requires that the Agricultural Mitigation Plan be finalized, based on final facility design and

¹³⁶ *Oregon Natural Desert Association v. Grant County*, 42 Or LUBA 9 (2002).

¹³⁷ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 125 of 158, Figure K-10.

¹³⁸ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 125 of 158, Figure K-10, and NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 158 of 158, Attachment K-1. Landowner letter from Mr. Kirkham.

landowner consultation, and implemented during construction and operation, based on the following condition:

Land Use Condition 2 (PRE): Prior to construction, the certificate holder shall finalize the Agricultural Mitigation Plan, based upon the preconstruction landowner consultation requirements provided in Attachment K-1 of the Final Order on the ASC. A copy of the final Agricultural Mitigation Plan shall be provided to the Department.
[PRE-LU-02]

Land Use Condition 3 (CON): During construction, the certificate holder shall implement the design and construction methods, as established in the Agricultural Mitigation Plan, as finalized in Land Use Condition 2.
[CON-LU-01]

The following conditions are based on applicant representations and Council findings to minimize the identified potential impacts:

- Soil Protection Condition 1 and 2 will require consultation with the Umatilla County Soil and Water Conservation District, prior to construction, and will require implementation of best management practices to minimize and monitor for offsite erosion impacts
- Soil Protection Condition 3 will require that, during operations, the applicant implement a Soil Monitoring Plan that will evaluate and mitigate for topsoil loss and erosion impacts resulting from construction
- Soil Protection Condition 4, 5 and 7 will require that the applicant adhere to the requirements of an SPCC during construction and operation, to minimize any potential impacts from soil contamination
- Fish and Wildlife Condition 1 will require that the applicant implement and adhere to the requirements of a Revegetation and Noxious Weed Plan, prior to and during construction and operation, including long-term revegetation and noxious weed control.
- Public Services Condition 1 will require implementation of a Traffic Management Plan and execution of a Road Use Agreement with Umatilla County Public Works Department, which will minimize potential traffic and dust-related impacts.
- Land Use Conditions 2 and 3 will require implementation of an Agricultural Mitigation Plan that will require that the applicant demonstrate completion of landowner consultation on facility design and construction methods, and that the applicant follow-through with any commitments on siting facility components to minimize agricultural impacts and provide adequate compensation for loss of agriculturally productive lands.
- Land Use Condition 18 will require that the applicant record a “Covenant Not to Sue” with Umatilla County

1 Steven H. Corey of Cunningham Sheep Company provided numerous statements the Council
2 weighed and considered as substantially supportive evidence that the facility will not result in
3 significant impacts to accepted farm practices, or the cost thereof. He stated:

- 4
- 5 • We are confident the project's location in this area will not negatively impact our
6 existing use of our land surrounding the solar project boundary or overall success of our
7 ranching and farming operations
- 8 • The project will enable us to support and improve our farming and ranching operations
9 in the surrounding areas by providing valuable lease payments we can invest in ongoing
10 activities on more active land elsewhere on our property
- 11 • We intend to devote lease revenues in part to improve housing for our sheep herders as
12 well as farm employees in the cattle and farming departments. The lease payments
13 projected exceed the potential revenues from the current dryland wheat production on
14 the project boundary today. With board approval we may also acquire, clean up and
15 refurbish a contiguous agriculture-related business to strengthen the diversity base of
16 our legacy team. The lease payments exceed the potential revenues from the current
17 dryland wheat production on the project boundary today.
- 18 • The project will not result in any loss of employees from our operations. To the contrary,
19 we expect to add agricultural jobs to our payroll based on the lease payments.
20 Specifically, we may add to our team up to 6 new employees with anticipated wages of
21 \$225,000 per year
- 22 • We also expect, or more likely, increase our operational spending with local agricultural
23 suppliers and service providers, given our projected increased investments in operations
24 on the land remaining in agricultural and ranching use and in the new agricultural-
25 related business.
- 26 • Net revenues per acre from land that will be used for wind or solar development by the
27 project will substantially exceed revenues from the present dry land wheat farming.¹³⁹
- 28

29 In addition, an adjacent non-participating owner, Mr. James Kirkham, provided a letter dated
30 January 14, 2022, stating that the proposed project would not hinder his ability to farm, or
31 increase the cost of farming on their property.¹⁴⁰

32
33 Based on the above facts and compliance with the conditions, the Council finds that the facility,
34 including wind, solar and transmission line components, will satisfy UCDC Section 152.061(A)
35 and (B).

36
37 **UCDC Section 152.615 Additional Conditional Use Permit Restrictions**

38
39 *In addition to the requirements and criteria listed in this subchapter, the Hearings Officer,*
40 *Planning Director or the appropriate planning authority may impose the following*

¹³⁹ NHWAPDoc2-10 ASC Exhibit K. Land Use_2022-01-31.

¹⁴⁰ Id.

1 *conditions upon a finding that circumstances warrant such additional restrictions: [list of*
2 *conditions omitted for brevity]*

3
4 The Council has the authority to impose additional conditions under UCDO 152.615. The
5 County, however, has not recommended any additional conditions under this provision, and the
6 Council therefore does not impose any additional conditions under this provision.

7
8 **UCDC Section 152.616(CCC) Conditional Use Criteria for a Utility Facility**

9
10 The criteria associated with UCDC 152.616(CCC) apply to transmission lines outside of the EFU
11 zone.

12
13 The facility includes an approximately 25.3-mile 230 kV UEC Cottonwood transmission line, of
14 which:

- 15 • approximately 8.4 miles will be a new single-circuit 230-kV transmission line,
- 16 • approximately 9.6 miles will replace an existing 12.47-kV distribution line with a 230-kV
- 17 transmission line and distribution underbuild, and
- 18 • approximately 7.3 miles will upgrade an existing 115-kV UEC transmission line to a
- 19 double-circuit 230/115-kV line with 12.47-kV underbuilt distribution.

20
21 The proposed 230 kV transmission line will be aboveground, on wooden H-frame or steel
22 monopole structures approximately 100 to 140 feet tall. The new 230 kV structures will also
23 include crossarms for distribution underbuild. This proposed transmission line will cross four
24 zones including EFU, RTC, AB, and LI. Approximately 23 miles of the proposed transmission line
25 will be located in within EFU-zoned land; applicable criteria are evaluated under UCDC Section
26 152.617(II)(7); the remaining approximately 2.4 miles will be located within RTC, AB, and LI
27 zones; applicable requirements within these zones are established in UCDC Section
28 152.616(CCC), as evaluated below.

29
30 UCDC 152.616(CCC) criteria are presented below.

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

35
36 Portions of the proposed UEC Cottonwood transmission line within the RTC, AB, and LI zones
37 are presented in Figure 4 below.

1 Figure 4: Proposed UEC Cottonwood Transmission Line - Proximate Uses



1 As presented in Figure 4 above, the proposed UEC Cottonwood transmission line will parallel
2 Colonel Jordan Road, span I-84, to then parallel a service road, crossing Westland Canal to the
3 UEC Cottonwood Substation. For the portion of the line extending from Colonel Jordan Road to
4 the Westland Canal, the line will be located within UEC's existing right-of-way, where there is
5 an existing UEC transmission line that will be replaced by the proposed line. Where the line will
6 cross the Westland Canal, the line will replace or be parallel to an existing line. The placement
7 of the transmission line within an existing utility corridor and or rights-of-way minimizes
8 conflicts with adjacent uses by siting infrastructure in locations where there is an existing
9 impact or existing infrastructure.

10
11 Important scenic values and recreational opportunities in proximity to the proposed UEC
12 Cottonwood transmission line are evaluated in Sections IV.J. *Scenic Resources* and IV.L. and
13 *Recreation* of this order. As presented in those sections, the closest resource to the proposed
14 UEC Cottonwood transmission line is the Echo Meadows ACEC site. Photo simulations of
15 potential visual impacts of the line at the Echo Meadows site were provided in ASC Exhibit R
16 Figure R-6. While these photo simulations were of the portions of the line within EFU-zoned
17 land, the results are used to inform the associated visual impact within the adjacent portions of
18 the RTC, AB, and LI zones where the line will be located.

19
20 The photo simulations demonstrate the existing viewshed as inclusive of wind turbines (from
21 other facilities), existing UEC and other power lines, agricultural structures, and multiple center-
22 pivot agricultural irrigation systems. The photo simulation also demonstrates that the proposed
23 230 kV UEC transmission line route will not be visible when visitors are oriented toward the
24 remnant Oregon Trail ruts. However, where not screened by topography, the proposed
25 transmission line will introduce new, moderately contrasting middle-ground and background
26 features in the viewshed of Echo Meadows. BLM's Outdoor Recreation Planner Brian Woolf
27 stated that the proposed transmission line will be in "conformance with the BLM's visual
28 resource zoning for that viewshed." For these reasons, the Council finds that the proposed UEC
29 Cottonwood transmission line will not conflict with scenic values within the applicable zones.

30
31 For the above-reasons, the Council finds that the proposed UEC Cottonwood transmission line
32 will satisfy 152.616(CCC)(1).

33
34 *(2) The facility be of a size and design to help reduce noise or other detrimental effects when*
35 *located adjacent to recreational residential dwellings;*

36
37 There are no recreational-residential dwellings within 0.5-mile of the portions of the proposed
38 UEC Cottonwood transmission line within the RTC, AB, and LI zones and therefore the proposed
39 transmission line is not expected to generate any level of noise or other detrimental effect to
40 recreational residential dwellings. The Council finds that the proposed UEC Cottonwood
41 transmission line will satisfy 152.616(CCC)(2).

42
43 *(3) The facility may be required to be fenced, landscaped or screened;*
44

1 This criterion allows there to be a requirement for fencing, landscaping or screening.
2 Temporary disturbance associated with the transmission line will be required to be restored,
3 consistent with the existing vegetation per Fish and Wildlife Habitat Condition 1. The applicant
4 is not proposing to fence or otherwise screen the transmission line. The Council relies on Fish
5 and Wildlife Habitat Condition 1 and otherwise finds it is not necessary to require fencing or
6 screening.

7
8 *(4) The facility does not materially alter the stability of the overall land use pattern of the*
9 *area;*

10
11 As presented in Figures 3 and 4 above, the proposed UEC Cottonwood transmission line will
12 parallel Colonel Jordan Road, span I-84, to then parallel a service road, crossing Westland Canal
13 to the UEC Cottonwood Substation. For the portion of the line extending from Colonel Jordan
14 Road to the Westland Canal, the line will be located adjacent to an existing road right-of-way,
15 where there is an existing UEC transmission line that will be replaced by the proposed line.
16 Where the line will cross the Westland Canal, the line will replace or be parallel to an existing
17 line. The placement of the transmission line adjacent to an existing utility corridor and or rights-
18 of-way minimizes impacts to the stability of the overall land use pattern in the area. Therefore,
19 the Council finds that the proposed UEC Cottonwood transmission line will satisfy
20 152.616(CCC)(4).

21
22 *(5) The facility does not constitute an unnecessary fire hazard, and consideration be made*
23 *for minimum fire safety measures which can include, but are not limited to:*

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

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

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

27
28 Applicant commits to using steel structures, conducting annual vegetation management and
29 safety checks to ensure that the proposed UEC Cottonwood transmission line will not constitute
30 an unnecessary fire hazard. To ensure that these representations are implemented, the Council
31 imposes the following condition:

32
33 **Land Use Condition 4 (PRE):** Prior to construction of the UEC Cottonwood Transmission
34 Line, if selected as the transmission line route during final facility design, the certificate
35 holder shall demonstrate to the Department that steel structures will be used within the
36 portions of the route with the RTC, AB, and LI zones.

37 [PRE-LU-03]

38
39 Public Services Condition 7 and 8 require implementation of fire prevention and response
40 measures, as presented in Attachment U-2 of this order, that will apply during construction and
41 operation, including annual vegetation management.

42
43 Based on compliance with the above-referenced conditions, the Council finds that the proposed
44 UEC Cottonwood transmission line will satisfy 152.616(CCC)(5).

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 As presented in Figure 4 above, the proposed UEC Cottonwood transmission line will parallel
8 Colonel Jordan Road, span I-84, to then parallel a service road, crossing Westland Canal to the
9 UEC Cottonwood Substation – there is no existing timberland within these areas. For the
10 portion of the line extending from Colonel Jordan Road to the Westland Canal, the line will be
11 located adjacent to an existing road right-of-way, where there is an existing UEC transmission
12 line that will be replaced by the proposed line. Where the line will cross the Westland Canal,
13 the line will replace or be parallel to an existing line. The placement of the transmission line
14 within an existing utility corridor and or rights-of-way minimizes impacts to the stability of the
15 overall land use pattern in the area.
16

17 Soil Protection Conditions 1 and 2 will require implementation of best management practices
18 and adherence to the requirements of a DEQ-issued NPDES 1200-C permit will support soil
19 protection via site stabilization, erosion control and monitoring requirements.
20

21 For these reasons, the Council finds that the proposed UEC Cottonwood transmission line will
22 satisfy 152.616(CCC)(6).
23

24 (7) *The facility shall adequately protect fish and wildlife resources by meeting minimum*
25 *Oregon State Department of Forestry regulations;*
26

27 The proposed UEC Cottonwood transmission line will not be located on forest lands or impact
28 timber resources. Therefore, there are no applicable Oregon State Department of Forestry
29 regulations.
30

31 (8) *Access roads or easements be improved to a standard and follow grades recommended*
32 *by the Public Works Director;*
33

34 Public Services Conditions 1 and 2 will require that the applicant obtain a Road Use Agreement
35 with Umatilla County, where any road or easement improvement will be agreed upon. Based on
36 compliance with these conditions, the Council finds that the proposed UEC Cottonwood
37 transmission line will satisfy 152.616(CCC)(8).
38

39 (9) *Road construction be consistent with the intent and purposes set forth in the Oregon*
40 *Forest Practices Act or the 208 Water Quality Program to minimize soil disturbance and*
41 *help maintain water quality;*
42

43 The proposed UEC Cottonwood transmission line will not be located on forest lands or impact
44 timber resources. Therefore, the Oregon Forest Practices Act will not apply.

1
2 Soil Protection Conditions 1 and 2 will require implementation of best management practices
3 and adherence to the requirements of a DEQ-issued NPDES 1200-C permit will support water
4 quality protection via site stabilization, erosion control and monitoring requirements.

5
6 For these reasons, the Council finds that the proposed UEC Cottonwood transmission line will
7 satisfy 152.616(CCC)(9).

8
9 *(10) Land or construction clearing shall be kept to a minimum to minimize soil*
10 *disturbances and help maintain water quality;*

11
12 Construction of the proposed UEC Cottonwood transmission line within the RTC, AB, and LI
13 zones will not result in significant ground disturbance/clearing activities. Nonetheless, the
14 Council requires in the draft Revegetation and Noxious Weed Plan, as part of plan finalization
15 prior to construction, that the applicant identify its grading plan and demonstrate that
16 adequate materials will be available to minimize disturbance and potential water quality
17 impacts. The finalization and adherence to the requirements of the Revegetation and Noxious
18 Plan will be required under Fish and Wildlife Habitat Condition 1, as presented in Section IV.H.
19 *Fish and Wildlife Habitat* of this order.

20
21 For these reasons, the Council finds that the proposed UEC Cottonwood transmission line will
22 satisfy 152.616(CCC)(10).

23
24 *(11) Complies with other conditions as deemed necessary provided in §152.615*

25
26 The Council did not adopt additional conditions under UCDC 152.615 for the portions of the
27 proposed UEC Cottonwood transmission line within the RTC, AB, and LI zones.

28
29 **UCDC Section 152.616(HHH) Conditional Use Criteria for Commercial Wind Power Generation**
30 **Facility**

31
32 *(1) County Permit Procedure*

33
34 *The procedure for taking action on the siting of a Wind Power Generation Facility is a*
35 *request for a conditional use. The County procedural requirements set forth in Section*
36 *152.616(HHH) (1)-(5), including the requirement for a hearing, will not apply to proposed*
37 *Wind Power Generation facilities for which Energy Facility Siting Council is making the land*
38 *use decision.*

39
40 UCDC 152.616(HHH)(1) provides that the procedural requirements of 152.616(HHH)(1) through
41 (5) do not apply to a wind power generation facility if the Council is making the land use
42 decision. In this case, the Council is making the land use decision, and therefore, under the
43 plain language of UCDO 152.626(HHH)(1), the procedural requirements of 152.616(HHH)(5) do
44 not apply to this facility.

1
2 (6) Standards/Criteria of Approval

3
4 *The following requirements and restrictions apply to the siting of a Wind Power Generation*
5 *Facility:*

6
7 (a) *Setbacks. The minimum setback shall be a distance of not less than the following:*

- 8
9 (1) *From a turbine tower to a city urban growth boundary (UGB) shall be two miles.*
10 *The measurement of the setback is from the centerline of a turbine tower to the*
11 *edge of the UGB that was adopted by the city as of the date the application was*
12 *deemed complete.*
13 (2) *From turbine tower to land zoned Unincorporated Community (UC) shall be 1*
14 *mile.*

15
16 The requirements of UCDC 152.616(HHH)(6)(a)(1) and (2) establish a 2-mile buffer for siting
17 turbine towers from a city Urban Growth Boundary (UGB) and a 1-mile buffer between turbine
18 towers and land that is zoned Unincorporated Community (UC), respectively.

19
20 There are no cities within the 0.5-mile land use analysis area, nor cities within 2 miles of the
21 proposed wind micrositing area. City UGBs within 5 miles of the proposed wind micrositing area
22 include Echo, Rieth and Pendleton.¹⁴¹ Given the distance between these city UGBs and the wind
23 micrositing area, as represented in ASC Exhibit K Figure K-2, all turbines will comply with the 2-
24 mile city UGB setback.

25
26 There are no UC-zoned lands within the land use analysis area, nor UC-zoned lands within 1-
27 mile of the proposed wind micrositing area. The closest UC-zoned lands are located more than
28 2-miles northeast of the proposed 230 kV UEC Cottonwood transmission line.¹⁴² Given the
29 distance between UC-zoned land and the wind micrositing area, as represented in ASC Exhibit K
30 Figure K-2, all turbines will comply with the 1-mile UC setback.

31
32 **Criterion (3) – Alternative Findings**

- 33
34 (3) *From a turbine tower to a rural residence shall be 2 miles. For purposes of this*
35 *section, "rural residence" is defined as a legal, existing single family dwelling*
36 *meeting the standards of §152.058 (F)(1)-(4), or a rural residence not yet in*
37 *existence but for which a zoning permit has been issued, on a unit of land not a*
38 *part of the Wind Power Generation Facility, on the date a Wind Power*
39 *Generation Facility application is submitted. For purposes of this section, the*
40 *setback does not apply to residences located on properties within the Wind*

¹⁴¹ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31.

¹⁴² *Id.*

1 *Power Generation Facility project application. The measurement of the setback is*
2 *from the centerline of the turbine tower to the center point of the rural residence.*
3

4 For the reasons set forth in Section IV.E.1.a of this order, Council finds that Criterion (3) does
5 not constitute “applicable substantive criteria” under ORS 469.504(1)(b)(A) or OAR 345-022-
6 0030(3) because the evidence on the record does not demonstrate it is required by any
7 statewide planning goal. Nonetheless, the Council also makes the separate and alternative
8 findings that even if Criterion (3) were an applicable substantive criterion, the facility meets the
9 Land Use standard under ORS 469.504(1)(b)(B) and ORS 460.504(5) for the reasons set forth in
10 the Contested Case Order, as provided in Attachment 1 of this order, and summarized below.
11

12 ORS 469.504(1)(b)(B) and ORS 469.504(5) establish a regulatory approach of evaluating a
13 combination of criteria and statewide planning goals in order to make findings of compliance
14 with the Land Use standard.
15

16 Pursuant to ORS 469.504(5), if the SAG recommends applicable substantive criteria for a
17 proposed facility that passes through more than one jurisdiction or more than three zones in
18 any one jurisdiction, the Council shall review the recommended criteria and determine whether
19 to evaluate the proposed facility against the applicable substantive criteria recommended by
20 the SAG, against the statewide planning goals or against a combination of the applicable
21 substantive criteria and statewide planning goals. The proposed facility, when accounting for
22 development actions (e.g., site preparation and equipment storage) crosses more than three
23 zones.¹⁴³ Under such circumstances, when making a determination under ORS 469.504(5), the
24 Council shall consult with the SAG and shall consider:

- 25 (a) The number of jurisdictions and zones in question;
26 (b) The degree to which the applicable substantive criteria reflect local government
27 consideration of energy facilities in the planning process; and
28 (c) The level of consistency of the applicable substantive criteria from the various zones and
29 jurisdictions.
30

31 As authorized by ORS 469.504(1)(b)(B) and ORS 469.504(5), the Council evaluated the proposed
32 facility, specifically the proposed wind facility components, against a combination of the
33 applicable substantive criteria recommended by the SAG and statewide planning goals. The
34 Council provides the following analysis of the factors in ORS 469.504(5)(a) through (c):
35

36 For factor (a) – the number of jurisdictions and zones in question – the site boundary of the
37 proposed 230 kV transmission line route options intersects more than three zones.
38

¹⁴³ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 112 of 158, Figure K-2. While the facility would almost entirely be located in EFU zoned land, the proposed UEC Cottonwood transmission line route would intersect three additional zones: Rural Tourist Commercial, Agri-Business, and Light Industrial. The facility would therefore pass through more than three zones in a single jurisdiction.

1 For factor (b) - the degree to which the applicable substantive criteria reflect local
2 government consideration of energy facilities in the planning process – the setback was
3 adopted by Umatilla County specifically to consider the impacts of energy facilities (wind
4 energy facilities) in the planning process. In their January 20, 2021 letter on the pASC¹⁴⁴, the
5 SAG commented:

6
7 *The county's two-mile setback for rural residences was adopted by Umatilla County*
8 *through Ordinance 2012-13. The original intent of the standard was to mitigate noise*
9 *and visual impacts to rural residences caused by wind towers. Umatilla County requests*
10 *that the applicant adjust the location of the turbines in order to meet the required*
11 *standard.*

12
13 Factor (c) requires the Council to consider the level of consistency of the applicable
14 substantive criteria from the various zones and jurisdictions. There is only one jurisdiction –
15 Umatilla County – Council must consider the level of consistency of the applicable
16 substantive criteria from the various zones. The two-mile setback from rural residences
17 required for wind turbines by UCDC 152.616(HHH)(6)(a)(3) is part of UCDC 152.616,
18 Standards for Review of Conditional Uses and Land Use Decisions. These criteria are specific
19 to certain *types* of uses, rather than specific zones, and therefore UCDC
20 152.616(HHH)(6)(a)(3) appears consistent from the various zones.

21
22 After consultation with the SAG and consideration of the ORS 469.504(5) factors (a) - (c), as
23 authorized by ORS 469.504(1)(b)(B), the Council evaluated the facility, specifically the proposed
24 wind facility components, against a combination of the applicable substantive criteria and
25 statewide planning goals.

26
27 Because the ASC presents up to 8 wind turbines that will not comply with Criterion (3), the
28 Council evaluates the proposed facility against all 19 Statewide Planning Goals consistent with
29 ORS 469.504(1)(b)(B).

30
31 **Goal 1, Citizen Involvement:**

32 "To develop a citizen involvement program that insures the opportunity for citizens to be
33 involved in all phases of the planning process."

34
35 Goal Compliance: This Goal governs public participation in the land-use process. The
36 Council's application for site certificate rules provide sufficient notice and comment periods to
37 satisfy Goal 1 as it applies to the facility.

38
39 **Goal 2, Land Use Planning:**

40 *"To establish a land use planning process and policy framework as a basis for all decision and*
41 *actions related to use of land and to assure an adequate factual base for such decisions and*

¹⁴⁴ NHWAPDoc3-9 pASC Umatilla County Comment 2021-01-20.

actions."

Goal Compliance: This Goal governs the land-use planning process. Goal 2 is not applicable to the facility because the applicant is proceeding under a specific, statutorily created land-use option, ORS 469.504(1)(b)(B).¹⁴⁵

Goal 3, Agricultural Lands:

"To preserve and maintain agricultural lands."

Goal Compliance: This Goal is designed for the maintenance and protection of agricultural lands by limiting uses which can have significant adverse effects on accepted farm and forest practices¹⁴⁶. All of the uses requested by the applicant are allowed in the Exclusive Farm Use zone, which is where most of the facility is proposed. All of the statutory and rule requirements associated with Goal 3 either applied directly or through the UCDC, if they have been adopted by Umatilla County, in this order. In all cases, the Council determines the applicant has met the burden of proof for all.

With regards to Criterion (3), the setback between wind turbines and rural residences does not affect the impact of the facility on agricultural lands. That is, locating a few of the turbines closer to the rural residences will not increase any impacts to agricultural lands.

Goal 4, Forest Lands:

"To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water,

Goal Compliance: This Goal is designed for the protection of forest lands. The facility will not disturb any forest lands as there are none in this vicinity of the facility. Therefore, the facility is consistent with this Goal.

Goal 5, Open Spaces, Scenic, Historic and Natural Resources:

"To conserve open space and protect natural and scenic resources."

Goal Compliance: Goal 5 requires local governments to adopt programs to implement the goal. The Umatilla County Comprehensive Plan (UCCP) Chapter 8 lists all of the Goal 5 resources inventoried by Umatilla County. These inventoried resources are conserved and protected through the establishment of overlay zones in the UCDC. None of these overlay zones were identified by the SAG as applicable to the facility. However, the following Council standards related to resources identified in Goal 5 and ensure those resources are evaluated and protected:

¹⁴⁶ Oregon Statewide Planning Goals and Guidelines 2019, Goal 3, p. 16

- Protected Areas
- Fish and Wildlife Habitat
- Threatened and Endangered Species
- Scenic Resources
- Historic, Cultural and Archaeological Resources

For each of these standards the Council determines the applicant has met the burden of proof. Therefore, the facility complies with Goal 5.

Goal 6, Air, Water and Land Resources:

"To maintain and improve the quality of the air, water and land resources of the state."

Goal Compliance: This Goal is primarily concerned with waste and process discharges to the land, water, and air of the state. At a federal level, the elements within Goal 6 correspond broadly to the Clean Air Act and Clean Water Act. At a state level, Goal 6 covers many areas regulated by the Oregon Department of Environmental Quality (DEQ) through its permitting actions. In addition to air, water and land resources Chapter 9 of the UCCP also lists noise impacts as part of Goal 6. In addition to these resources being protected through other land use regulations that are applicable substantive criteria in the UCDC, the Council also implements the following standards which also protect these resources:

- Soil Protection
- Water
 - Soil Protection Standard
 - Fish and Wildlife Habitat
 - Threatened and Endangered Species
 - Oregon Water Resources Water Rights (ORS 537 and 540 and OAR Chapter 690)
- DEQ's Noise Regulations (OAR 340—035-0035)
- Department of State Land's Removal Fill Law (ORS 196.795 through 196.990) and (OAR

For each of these standards the Council determines the applicant has met the burden of proof. Therefore, the facility complies with Goal 6.

Goal 7, Areas Subject to Natural Disasters and Hazards:

"To protect life and property from natural disasters and hazards."

Goal Compliance: This Goal is intended to ensure that developments which could be damaged by natural disasters with the potential for resultant injury to persons or property are approved only where appropriate safeguards are in place. The Council's Structural standard ensures the application complies with this goal and the Council determines the applicant has met the burden of proof for that standard. The facility therefore complies with Goal 7.

Goal 8, Recreational Needs:

"To satisfy the recreational needs of the citizens of the state and visitors and, where

1 *appropriate, to provide for the siting of necessary recreational facilities including destination*
2 *resorts."*

3
4 Goal Compliance: The Council's Recreation standard ensures the application complies with this
5 goal and the Council determines the applicant has met the burden of proof for that standard.
6 The facility therefore complies with Goal 8.

7
8 ***Goal 9, Economic Development:***

9 *"To provide adequate opportunities throughout the state for a variety of economic activities*
10 *vital to the health, welfare, and prosperity of Oregon's citizens.*

11
12 Goal Compliance: This Goal provides certain guidelines for local governments to follow to
13 stimulate economic growth. While this goal is largely oriented toward urban areas and major
14 industrial and commercial development, it also states that "...plans shall be based on
15 inventories of areas suitable for economic growth..."¹⁴⁷ The facility is largely located in the
16 Exclusive Farm Use zone which allows for a commercial utility facility for the purpose of
17 generating for public use by sale, subject to conditional use review. The legislature therefore
18 has determined that this zoning designation is appropriate for this type of project and any
19 associated economic development as a result of it as long as it meets all applicable Goal 3
20 statutes and rules required by the conditional use review. The applicant indicates the economic
21 value will include: 1) lease payments to each landowner which will more than compensate for
22 the loss of agricultural revenue; 2) short term temporary construction jobs and the associated
23 dollars spent locally; 3) long term operational jobs; and 4) tax revenue for the county. Based on
24 the economic development value indicated by the applicant as well as the Council's findings
25 that the applicant has met the burden of proof for all required statutes and rules associated
26 with Goal 3, the facility complies with Goal 9.

27
28 ***Goal 10, Housing:***

29 *"To provide for the housing needs of citizens of the state."*

30
31 Goal Compliance: This goal is intended to assist local governments in developing plans to
32 provide adequate housing. In particular, Goal 10 requires local governments to inventory their
33 buildable lands and to decide which lands must be used for residential development to meet
34 projected housing needs. Except for the UEC Cottonwood transmission line, which is in
35 commercial and industrial zones, the Project is within the Exclusive Farm Use zone which limits
36 the development of non-farm housing by statute. The facility will be at least 2 miles from a UGB
37 and 1 mile from UC-designated areas of the county that include zoning that permits residential
38 development. The facility will not prevent residential development on these lands and will not
39 result in any land being removed from the county's inventory of buildable land. The facility will
40 not interfere with the county's ability to provide needed housing for its citizens. Therefore, the
41 facility complies with Goal 10.

42

¹⁴⁷ Oregon Statewide Planning Goals and Guidelines 2019, Goal 9, p. 40

1 **Goal 11, Public Facilities and Services:**

2 *"To plan and develop a timely, orderly and efficient arrangement of public facilities and services*
3 *to serve as a framework for urban and rural development."*

4
5 Goal Compliance: This goal requires local governments to coordinate their land-use planning
6 with an analysis of the availability of public facilities and services such as water, sewer, and
7 roads. The Council's Public Services standard evaluates impacts of the project on public facilities
8 and services and the Council determines the applicant has met the burden of proof for that
9 standard. The facility therefore complies with Goal 11.

10
11 **Goal 12, Transportation:**

12 *"To provide and encourage a safe, convenient and economic transportation system."*

13
14 Goal Compliance: This goal governs local government decisions regarding transportation
15 facilities. Umatilla adopted their Transportation System Plan in 2002. Below is the description of
16 the plan in Chapter 1: Introduction.

17
18 *The Umatilla County Transportation System Plan (TSP) guides the management of existing*
19 *transportation facilities and the design and implementation of future facilities in Umatilla*
20 *County for the next 20 years. This Transportation System Plan constitutes the transportation*
21 *element of the County's Comprehensive Plan and satisfies the requirements of the Oregon*
22 *Transportation Planning Rule (TPR) (OAR 660-12-045) established by the Department of*
23 *Land Conservation and Development. It identifies transportation projects for*
24 *implementation under a Umatilla County Capital Improvement Program (CIP) and inclusion*
25 *in the Oregon Department of Transportation (ODOT) Statewide Transportation Improvement*
26 *Program (STIP).*

27
28 In addition to this plan being implemented through the UCDC, all applicable parts of the plan
29 are used to evaluate the application against the transportation element in Council's Public
30 Services standard and the Council determines the applicant has met the burden of proof for
31 that standard. Therefore, the facility complies with Goal 12.

32
33 **Goal 13, Energy Conservation:**

34 *"To conserve energy."*

35
36 Goal Compliance: In several site certificates the Council has concluded that Goal 13 does not
37 call for renewable energy facilities nor does it address where such facilities should be located.
38 This Goal is therefore not applicable to the facility.

39
40 **Goal 14, Urbanization:**

41 *"To provide for an orderly and efficient transition from rural to urban land use."*

42
43 Goal Compliance: Goal 14 governs the transition from rural to urban land use in areas outside
44 of established Urban Growth Boundaries (UGB's). It provides for the establishment of UGBs to

1 ensure the efficient and compatible use of land to provide for livable communities and limits
2 urban development outside of UGB's. The rule implementing Goal 14 for rural
3 residential areas specifies the level of development a county may allow without the area
4 becoming urbanized. The project is primarily located in the Exclusive Farm Use zone and
5 entirely outside of UGBs. While utility scale wind and solar development are industrial uses,
6 they are also allowed in the Exclusive Farm Use zone, subject to conditional use review. The
7 required statutes and rules associated with that conditional use review ensure that if approved,
8 it will be compatible with surrounding agricultural practices and therefore does not reach the
9 level of an urban use. Based on the Council's findings that the applicant has met the burden of
10 proof for all required statutes and rules associated with Goal 3, the proposed wind facility
11 components will comply with Goal 14.

12
13 **Goal 15 Willamette River Greenway:**

14 *"To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural,*
15 *economic and recreational qualities of lands along the Willamette River as the Willamette River*
16 *Greenway."*

17
18 Goal Compliance: This goal is not applicable to the facility because it is not located in any of the
19 geographical areas covered by the goal.

20
21 **Goal 16 Estuarine Resources:**

22 *"To recognize and protect the unique environmental, economic and social values of each estuary*
23 *and associated wetlands; and To protect, maintain, where appropriate develop, and where*
24 *appropriate restore the long-term environmental, economic, and social values, diversity and*
25 *benefits of Oregon's estuaries."*

26
27 Goal Compliance: This goal is not applicable to the facility because it is not located in the
28 geographical areas covered by the goal.

29
30 **Goal 17 Coastal Shorelands:**

31 *"To conserve, protect, where appropriate, develop and where appropriate restore the resources*
32 *and benefits of all coastal shorelands, recognizing their value for protection and maintenance of*
33 *water quality, fish and wildlife habitat, water dependent uses, economic resources and*
34 *recreation and aesthetics. The management of these shoreland areas shall be compatible with*
35 *the characteristics of the adjacent coastal waters; and To reduce the hazard to human life and*
36 *property, and the adverse effects upon water quality and fish and wildlife habitat, resulting*
37 *from the use and enjoyment of Oregon's coastal shorelands."*

38
39 Goal Compliance: This goal is not applicable to the facility because it is not located in the
40 geographical areas covered by the goal.

41
42 **Goal 18 Beaches and Dunes:**

43 *"To conserve, protect, where appropriate develop, and where appropriate restore the resources*

1 *and benefits of coastal beach and dune areas; and to reduce the hazard to human life and*
2 *property from natural or man-induced actions associated with these areas.”*

3
4 Goal Compliance: This goal is not applicable to the facility because it is not located in the
5 geographical areas covered by the goal.

6
7 **Goal 19 Ocean Resources:**

8 *“To conserve marine resources and ecological functions for the purpose of providing long-term*
9 *ecological, economic, and social value and benefits to future generations.”*

10
11 Goal Compliance: This goal is not applicable to the facility because it is not located in the
12 geographical areas covered by the goal.

13
14 Based on the analysis and findings, the Council concludes, as authorized under ORS
15 469.504(1)(b)(B), that while some wind turbine locations will not comply with Criterion (3), the
16 entire facility nevertheless complies with applicable Statewide Planning Goals.

17
18 **UCDC Section 152.616(HHH) Conditional Use Criteria for Commercial Wind Power Generation**
19 **Facility (continued)**

20
21 UCDC 152.616(HHH)(6)(a)

22
23 *(4) From a turbine tower to the boundary right-of-way of County Roads, state and*
24 *interstate highways, 110% of the overall tower-to-blade tip height. Note: The*
25 *overall tower-to-blade tip height is the vertical distance measured from grade to*
26 *the highest vertical point of the blade tip.*

27
28 Wind turbines will be designed within the micrositing area to comply with this setback. The
29 Council imposes the following condition to ensure compliance with UCDC
30 152.616(HHH)(6)(a)(4):

31
32 **Land Use Condition 5 (PRE):** Prior to construction of wind facility components, the
33 certificate holder shall provide final site maps with turbine locations and boundary
34 right-of-way of County roads, state and interstate highways. The maps shall be
35 accompanied by a table with distance (in feet) from turbines to road boundary
36 rights-of-way and shall demonstrate that turbines have been sited based on a
37 minimum setback of 110% of the overall tower-to-blade tip height.

38 [PRE-LU-04]

39
40 Based on compliance with the condition, the Council finds that the wind facility components
41 will comply with UCDC 152.616(HHH)(6)(a)(4).

42
43 *(5) From tower and project components, including transmission lines, underground*
44 *conduits and access roads, to known archeological, historical or cultural sites*

1 *shall be on a case by case basis, and for any known archeological, historical or*
2 *cultural site of the Confederated Tribes of the Umatilla Indian Reservations the*
3 *setback shall be no less than 164 feet (50 meters)*
4

5 UCDC 152.616(HHH)(6)(a)(5) establishes a 50-meter minimum setback requirement from wind
6 facility components to known CTUIR archeological, historical or cultural sites; and a setback,
7 based on a case-by-case basis for other known archeological, historical or cultural sites. As
8 presented in Table 14 in Section IV.K *Historic, Cultural and Archeological Resources* of this
9 order, all identified CTUIR resources will be avoided by a minimum distance of 50 meters. All
10 other identified resources will be avoided or if not avoided, based on likely ineligibility for listing
11 on the NRHP, have been mitigated through recordation of the site and NRHP criteria through
12 SHPO's OARRA database. Based on the avoidance measures required under Historic, Cultural
13 and Archeological Resources Condition 2, the Council finds that the wind facility components
14 will comply with the setbacks under UCDC 152.616(HHH)(6)(a)(5).
15

16 *(6) New electrical transmission lines associated with the wind project shall not be*
17 *constructed closer than 500 feet to an existing residence without prior written*
18 *approval of the homeowner, said written approval to be recorded with county*
19 *deed records. Exceptions to the 500 feet setback include transmission lines placed*
20 *in a public right of way.*
21

22 There are no residences within the site boundary; there are residences within 1-mile of the site
23 boundary. To ensure that any new electrical transmission lines are constructed in accordance
24 with the 500-foot setback, or based on written landowner approval, the Council imposes the
25 following condition to comply with UCDC 152.616(HHH)(6)(a)(6):
26

27 **Land Use Condition 6 (PRE):** Prior to construction of wind facility components, the
28 certificate holder shall:

- 29 a. Identify all electrical transmission lines to be included in the final design.
30 b. Demonstrate via maps presenting wind facility components and dwelling locations,
31 obtained from Umatilla County, that all electrical transmission lines meet a
32 minimum 500-foot setback from dwellings, unless located within a public right-of-
33 way or landowner approval and deed recordation has been obtained and
34 completed.

35 [PRE-LU-05]
36

37 Subject to compliance with the condition, the Council finds that the wind facility components
38 will comply with UCDC 152.616(HHH)(6)(a)(6).
39

40 *(7) The turbine/towers shall be of a size and design to help reduce noise or other*
41 *detrimental effects. At a minimum, the Wind Power Generation Facility shall be*
42 *designed and operated within the limits of noise standard(s) established by the*
43 *State of Oregon. A credible noise study may be required to verify that noise*
44 *impacts in all wind directions are in compliance with the State noise standard.*

UCDC 152.616(HHH)(6)(a)(7) requires that wind turbines be designed and operated within the noise standard limits of the State of Oregon. An acoustic noise analysis is included in ASC Exhibit X and evaluated in Section IV.Q.1. *Noise Control Regulations* of this order. Based on the acoustic noise analysis, the facility will exceed the ambient noise degradation standard at several noise sensitive receptors; however, the Council imposes Noise Control Condition 1 requiring that the applicant submit, prior to construction, a final acoustic noise analysis that demonstrates that the facility, at final design, complies with the standard or provides evidence of a deed recorded waiver of the standard from the landowner, as is allowable for wind facilities pursuant to OAR 340-035-0035(1)(b)(B)(iii)(III). Based on compliance with the Noise Control conditions, the Council finds that the facility will comply with UCDC 152.616(HHH)(6)(a)(7).

(b) Reasonable efforts shall be made to blend the wind turbine/towers with the natural surrounding area in order to minimize impacts upon open space and the natural landscape.

Umatilla County's Comprehensive Plan states that "pasture, range, forest, and crop lands provide most of the open space in the county."¹⁴⁸ Proposed wind turbines will be painted standard white per Federal Aviation Administration (FAA) guidelines and will be sited at the edge of farm fields and along existing natural and developed site contours, minimizing the need for grading and cut-and-fill slopes. The Council finds that these two design features represent reasonable efforts to blend the turbine towers with the natural surrounding area, consistent with UCDC 152.616(HHH)(6)(b). Compliance with FAA turbine painting and lighting requirements is covered under Public Services Condition 3 (see Section IV.M.6 *Public Services - Air Traffic* of this order). The Council imposes a condition, consistent with the applicant's representation¹⁴⁹, that wind turbines will be sited in a manner that utilizes existing natural and developed contours and minimized grading and cut-and-fill slopes to the maximum extent practicable, to minimize impact to the natural landscape.

Land Use Condition 7 (PRE): Prior to construction of wind facility components, certificate holder shall demonstrate to the Department that its contractor(s) have developed a grading and cut-and-fill plan that utilizes existing site contours and demonstrates engineering measures to minimize grading and cut-and-fill to the maximum extent feasible.

[PRE-LU-06]

Based upon the applicant's representations and compliance with the conditions, the Council finds that the proposed wind facility components will comply with UCDC 152.616(HHH)(6)(b).

¹⁴⁸ Umatilla County Comprehensive Plan, Revision Date: March 28, 2022, page 8-1.

¹⁴⁹ OAR 345-025-0006(10).

1 (c) *The development and operation of the Wind Power Generation Facility will include*
2 *reasonable efforts to protect and preserve existing trees, vegetation, water resources,*
3 *wildlife, wildlife habitat, fish, avian, resources, historical, cultural and archaeological*
4 *site.*

5
6 Site certificate conditions that ensure the existing trees, vegetation, water resources, wildlife,
7 avian and historic resources will be protected are as follows, and are presented in in this order
8 and in Attachment A:

- 9
10
 - Fish and Wildlife Habitat Conditions 1-5: (trees and veg)
 - 11 • Water Rights Condition 3 (Water Resources)
 - 12 • Fish and Wildlife Habitat Conditions 6-8 (wildlife/avian)
 - 13 • Fish and Wildlife Habitat Conditions 1-5 (wildlife habitat)
 - 14 • Historic, Cultural and Archeological Conditions 1-6 (Historic, cultural and archeological
 - 15 sites)

16
17 Subject to compliance with the condition, which include numerous applicant representations
18 intended to minimize impacts to the listed resources, the proposed wind facility will comply
19 with the applicable requirements, the Council finds that the facility will satisfy UCDC
20 152.616(HHH)(6)(c).

21
22 (d) *The turbine towers shall be designed and constructed to discourage bird nesting and*
23 *wildlife attraction.*

24
25 UCDC 152.616(HHH)(6)(d) requires that turbine towers be designed and constructed to
26 discourage bird nesting and wildlife attraction. The wind turbines will include a smooth finish
27 with hollow turbine towers, which do not provide suitable nesting habitat for birds. To
28 minimize wildlife attraction, the applicant proposed to:

- 29
30
 - Adhere to a 0.25-mile setback from active ferruginous hawk and Swainson's hawk nests
 - 31 • Adhere to a 200-meter setback along Alkali Canyon and all contour lines containing
 - 32 topographical high points and distinct canyon edges
 - 33 • Utilize the ASC avian and eagle use survey results to site turbines away from high-raptor
 - 34 use areas

35
36 These representations are to be incorporated into a condition, under Fish and Wildlife Habitat
37 Condition 7. Based on compliance with the referenced condition, the Council finds that the
38 proposed wind turbines will satisfy UCDC 152.616(HHH)(6)(d).

39
40 (e) *Private access roads established and controlled by the Wind Power Facility shall be gated*
41 *and signed to protect the Wind Power Generation Facility and property owners from*
42 *illegal or unwarranted trespass, illegal dumping and hunting and for emergency*
43 *response.*

Subject to compliance with the conditions, the Council finds that the facility will satisfy UCDC 152.616(HHH)(6)(e):

Land Use Condition 8 (PRE): Prior to construction of wind facility components, the certificate holder shall provide to the Department final facility design maps, presenting all existing, new or substantially modified private roads for which it will have control during construction and operation. The maps shall identify the location of gates and facility signage that both prohibits illegal access and allows for emergency access.
[PRE-LU-07]

Land Use Condition 9 (GEN): During construction and operation, the certificate holder shall ensure gates and no trespassing signs are in place and maintained to prohibit illegal access and allow for emergency response.
[GEN-LU-01]

Subject to compliance with the condition, the Council finds that the facility will satisfy UCDC 152.616(HHH)(6)(e).

(f) Where practicable the electrical cable collector system shall be installed underground, at a minimum depth of 3 feet; elsewhere the cable collector system shall be installed to prevent adverse impacts on agriculture operations.

Subject to compliance with the conditions, the Council finds that the facility will satisfy UCDC 152.616(HHH)(6)(f):

Land Use Condition 10 (PRE): Prior to construction of underground collection lines associated with wind facility components, the certificate holder shall provide to the Department evidence that underground trenches for the underground electric collection system have been designed to extend a minimum depth of 3-feet below ground surface, unless technological or engineering feasibility are clearly identified.
[PRE-LU-08]

Subject to compliance with the condition, the Council finds that the facility will satisfy UCDC 152.616(HHH)(6)(f).

(g) Required permanent maintenance/operations buildings shall be located off site in one of Umatilla County's appropriately zoned areas, except that such a building may be constructed on site if:

- (1) The building is designed and constructed generally consistent with the character of similar buildings used by commercial farmers or ranchers, and*
- (2) The building will be removed or converted to farm use upon decommissioning of the Wind Power Generation Facility consistent with the provisions of §152.616 (HHH) (7).*

1
2 The proposed (O&M) building will consist of a 6,000-square foot warehouse with maintenance
3 bay, control room, office, break room, kitchen, bathroom with shower, utility room, server
4 room, and storage room. Outdoor lighting at the O&M building will be kept to a minimum
5 through the use of motion sensors and switches to reduce lighting to the minimum required for
6 safety when not in use, and lighting will be directed downward and inward to prevent off-site
7 glare.¹⁵⁰ The O&M Building will be designed and constructed to be generally consistent with the
8 character of agricultural buildings used by farmers or ranchers in the area, and the buildings
9 finished in a neutral color to blend with the surrounding landscape. The Council imposes the
10 following condition to ensure that the final design and exterior finishes of the proposed O&M
11 building comply with this criterion:

12
13 **Land Use Condition 11 (PRE):** Prior to construction of the O&M building, the certificate
14 holder shall provide to the Department evidence that the O&M design and construction
15 materials are consistent with the characters of similar agricultural buildings used by
16 commercial farmers or ranchers in Umatilla County.

17 [PRE-LU-09]
18

19 Consistent with UCDC 152.616(HHH)(6)(g)(2), Council's Retirement and Financial Assurance
20 standard requires that, upon cessation of construction or operation of the facility, the applicant
21 decommission all facility components, including the O&M building unless requested to remain
22 by the landowner, in a manner that restores the site to a useful, nonhazardous condition.
23 Therefore, the county will be protected against decommissioning costs pursuant to the bond
24 required by Retirement and Financial Assurance Condition 4. The Council relies on Retirement
25 and Financial Assurance Conditions 1 through 4 for this criterion.
26

27 Based on the evaluation provided above, and subject to compliance with the condition and
28 identified conditions in other sections, the Council finds that the facility will satisfy UCDC
29 152.616(HHH)(6)(g).
30

31 *(h) A Wind Power Generation Facility shall comply with the Specific Safety Standards for*
32 *Wind Energy Facilities delineated in OAR 345 024 0010 (as adopted at time of*
33 *application).*
34

35 Compliance with OAR 345-024-0010, the Public Health and Safety Standards for Wind Energy
36 Facilities, is discussed in Section IV.P.1, *Public Health and Safety Standards for Wind Facilities* of
37 this order. The Council finds that subject to compliance with the site certificate conditions in
38 that section, the facility will comply with the specific safety standards set forth at OAR 345-024-
39 0010 and therefore will also comply with UCDC 152.616 (HHH)(6)(h)
40

41 *(i) A Covenant Not to Sue with regard to generally accepted farming practices shall be*
42 *recorded with the County. Generally accepted farming practices shall be consistent with*

¹⁵⁰ NHWAPDoc2-17 ASC Exhibit R. Scenic_2022-01-31 Page 25 of 47.

1 *the definition of Farming Practices under ORS 30.930. The Wind Power Generation*
2 *Facility owner/operator shall covenant not to sue owners, operators, contractors,*
3 *employees, or invitees of property zoned for farm use for generally accepted farming*
4 *practices.*

5
6 Subject to compliance with the condition, the Council finds that the facility will satisfy UCDC
7 152.616 (HHH)(6)(i):

8
9 **Land Use Condition 12 (PRE):** Prior to construction of wind facility components, the
10 certificate holder, and underlying landowners on whose property the wind facility
11 components are located, shall record in the real property records of Umatilla County a
12 Covenant Not to Sue with regard to generally accepted farming practices on adjacent
13 farmland.
14 [PRE-LU-10]

15
16 (j) *Roads.*

17 (1) *County Roads. A Road Use Agreement with Umatilla County regarding the impacts*
18 *and mitigation on county roads shall be required as a condition of approval.*

19
20 (2) *Project Roads. Layout and design of the project roads shall use best management*
21 *practices in consultation with the Soil Water Conservation District. The project road*
22 *design shall be reviewed and certified by a civil engineer. Prior to road construction*
23 *the applicant shall contact the State Department of Environmental Quality and if*
24 *necessary, obtain a storm water permit (National Pollution Discharge Elimination*
25 *System).*

26
27 UCDC 152.616 (HHH)(6)(j)(1) requires that the applicant execute a Road Use Agreement with
28 Umatilla County prior to beginning construction. In Section IV.M.5. *Public Services - Traffic*
29 *Safety*, the Council imposes Public Services Condition 1 requiring, in part, that the applicant
30 execute a Road Use Agreement with Umatilla County Public Works Department. Based on
31 compliance with the condition, the Council finds that the applicant will comply with this
32 criterion.

33
34 UCDC 152.616 (HHH)(6)(j)(2) requires that the applicant develop the layout and design of roads
35 in consultation with the Umatilla County Soil Water Conservation District, to be certified by a
36 civil engineer and in compliance with a DEQ-issued NPDES 1200-C permit. In Section IV.D. *Soil*
37 *Protection*, the Council imposes Soil Protection Condition 1, where these requirements are
38 included. Based on compliance with the condition, the Council finds that the applicant will
39 comply with this criterion.

40
41 (k) *Demonstrate compliance with the standards found in OAR 660-033-0130(37).*

42
43 This evaluation is presented in Section IV.E.2. of this order. Therefore, the Council finds that the
44 applicant satisfies this criterion.

1
2 *(l) Submit a plan for dismantling of uncompleted construction and/or decommissioning*
3 *and/or re-powering of the Wind Power Generation Facility as described in §152.616*
4 *(HHH)(7).*
5

6 The tasks and actions associated the facility decommissioning are included in ASC Exhibit W and
7 evaluated in Section IV.G *Retirement and Financial Assurance* of this order. Under the EFSC
8 process, there are also mandatory conditions and rules for facility decommissioning that apply
9 to the facility.¹⁵¹ Therefore, the Council finds that the applicant satisfies this criterion.

10
11 *(m) A surety bond shall be established to cover the cost of dismantling uncompleted*
12 *construction and/or decommissioning of the Wind Power Generation Facility, and site*
13 *rehabilitation pursuant to §152.616 (HHH) (7) and (8). The intent of this requirement is*
14 *to guarantee performance (not just provide financial insurance) to protect the public*
15 *interest and the county budget from unanticipated, unwarranted burden to*
16 *decommission wind projects. For projects sited by the State of Oregon's Energy Facility*
17 *Siting Council (EFSC), the bond or letter of credit required by EFSC will be deemed to*
18 *meet this requirement.*
19

20 As presented in Section IV.G *Retirement and Financial Assurance* of this order, the Council
21 adopts Retirement and Financial Assurance Condition 4 requiring that, prior to construction,
22 the applicant obtain a bond or letter of credit, based on the decommissioning cost of the final
23 design facility, using a Council approved bond or letter of credit template and entity. Based on
24 compliance with the condition, the Council finds that the applicant satisfies this criterion.

25
26 *(n) The actual latitude and longitude location or Stateplane NAD 83(91) (suitable for GPS*
27 *mapping) coordinates of each turbine tower, connecting lines, O & M building,*
28 *substation, project roads and transmission lines, shall be provided to Umatilla County on*
29 *or before starting electrical production.*
30

31 Subject to compliance with the condition, the Council finds that the facility will satisfy UCDC
32 152.616 (HHH)(6)(n):
33

34 **Land Use Condition 13 (PRO):** Prior to operation of wind facility components, the
35 certificate hold shall provide the final location of each wind turbine, electrical collection
36 system, O&M building, substation, access roads and transmission lines, as applicable to
37 final design, to the Umatilla County Planning Department and Department in a format
38 suitable for GPS mapping.

39 [PRO-LU-01]
40

41 *(o) An Operating and Facility Maintenance Plan shall be submitted and subject to County*
42 *review and approval.*

¹⁵¹ OAR 345-025-0006(9) & (16); and OAR 345-027-0110(4)

As an EFSC-jurisdictional facility, unless the O&M Plan review and approval is a ministerial process, a subsequent approval by the county would be inconsistent with ORS 469.401(3). If a site certificate is approved by EFSC, the applicant will be required to submit a Compliance Plan that demonstrates compliance with all operational conditions, OAR 345-026-0048 – Compliance Plan. The Council finds that its Compliance Plan would provide the applicable components of an O&M Plan that could be subject to review by the Department, in consultation with the County, as applicable. Submission of a compliance plan will be required under General Standard Condition 9, as presented in Section IV.A. *General Standard of Review* of this order.

Based on compliance with General Standard Condition 9, the Council finds that the applicant will satisfy this criterion.

(p) A summary of as built changes to the original plan, if any, shall be provided by the Wind Power Generation Facility owner/operator 90 days of starting electrical production.

Council's reporting requirements for energy facilities under OAR 345-026-0080 require that the applicant submit a summary of changes to that the facility that may have occurred within the reporting year. And, under Council's mandatory condition at OAR 345-025-0006(2), imposed in General Standard Condition 2, the applicant is required to submit a legal description of the site within 90-days of commercial operation.

Therefore, the Council finds that a legal description and a summary of changes of the facility, at final facility design, compared to the preliminary design facility, will be provided under the rule and condition, consistent with this criterion.

(q) Submit a Socioeconomic Assessment of the Wind Power Generation Facility.

An assessment of potential temporary and permanent impacts to public and private service providers is provided in ASC Exhibit U. The Council finds that this criterion is satisfied.

(7) Dismantling/Decommissioning.

A plan for dismantling and/or decommissioning that provides for completion of dismantling or decommissioning of the Wind Power Generation Facility without significant delay and protects public health, safety and the environment in compliance with the restoration requirements of this section.

(a) A description of actions the Wind Power Generation Facility owner/operator proposes to take to restore the site to a useful, non-hazardous condition, including options for post dismantle or decommission land use, information on how impacts on fish, wildlife, avian populations and the environment would be minimized during the dismantling or decommissioning process, and measures to protect the public against risk or danger resulting from post decommissioning site conditions in compliance with the requirements of this section.

1
2 These requirements are mirrored in the Council's site certificate termination requirements
3 under OAR 345-027-0110. Therefore, the Council finds that the facility will comply with this
4 criterion through compliance with Council rules.
5

6 *(b) A current detailed cost estimate, a comparison of that estimate with present funds, the*
7 *bond for dismantling or decommissioning, and a plan for the availability of adequate*
8 *funds for completion of dismantling or decommissioning. The cost estimate will be*
9 *reviewed and be updated by the Wind Power Generation Facility owner/operator on a 3-*
10 *year basis, unless material changes have been made in the overall Wind Power*
11 *Generation Facility that would materially increase or decrease these costs. If so, the*
12 *report must be revised within 120 days of completion of such changes.*
13

14 UCDO 152.616(HHH)(7)(b) establishes various wind facility decommissioning plan
15 requirements. First, the detailed cost estimate is included in ASC Exhibit W; this estimate was
16 reviewed, revised and determined satisfactory by Council for the Retirement and Financial
17 Assurance standard (see Section IV.G of this order) – this detailed cost estimate is presented in
18 Table 7 of this order.
19

20 Second, a comparison of the estimate to available funds is assured via the RBC Bank Letter
21 provided by the applicant on March 2, 2022 which stated that "Capital Power US Holdings Inc.
22 (CPUSHI) is a valued client of Royal Bank of Canada (RBC)...[and that it's their] understanding
23 that CPUSHI (as parent of the Applicant, Nolin Hills Wind LLC) may be asked to provide a letter
24 of credit and that the potential liability of the letter of credit could total an amount of up to
25 thirty-nine million dollars (\$39,000,000.00)." Furthermore, the letter clarifies that RBC "has an
26 ongoing relationship with CPUSHI which includes providing credit facilities and from time to
27 time, issuing letters of credit. As of today [(3/2/2022)], CPUSHI has sufficient capacity on its
28 credit facility to issue the letter of credit."¹⁵² RBC has been evaluated by Council and is included
29 on the 2022 pre-approved financial institution list.
30

31 Third, Retirement and Financial Assurance Condition 4 will require that, prior to construction,
32 the applicant obtain and submit, to the Department, a bond or letter of credit based on the
33 approved decommissioning amount, adjusted based on final design. This condition requires
34 that the bond or letter of credit be maintained with the Department, adjusted annually for
35 inflation, for the life of the facility.
36

37 The Council finds that the facts, evidence and conditions described above address the
38 requirement under UCDO 152.616(HHH)(7)(b) for a detailed cost estimate, a comparison of that
39 estimate with present funds, a bond, and a plan for the availability of adequate funds.
40

41 The 3-year re-evaluation of the decommissioning estimate offers a distinct element, which the
42 Council adopts as a requirement applicable to the wind facility components, as follows:

¹⁵² NHWAPPDoc2-30 ASC Additional Information Package Exhbs B, M, O, J, U, DD 2022-03-04.

Land Use Condition 14 (OPR): Within each 3-year annual report to the Department, the certificate holder shall revise the decommissioning estimate for wind facility components based on evaluation of the assumptions of the costs of tasks and actions. Certificate holder shall confirm whether the bond or letter of credit maintained with the Department under Retirement and Financial Assurance Condition 4 needs to be updated to reflect revisions; or shall confirm that there are no revisions necessary.
[OPR-LU-01]

Based on the above described facts and compliance with conditions, the Council finds that the facility will comply with this criterion.

(c) Restoration of the site shall consist of the following:

- (1) Dismantle turbines, towers, pad mounted transformers, meteorological towers and related aboveground equipment. All concrete turbine pads shall be removed to a depth of at least three feet below the surface grade.*
- (2) The underground collection and communication cables need not be removed if at a depth of three feet or greater. These cables at a depth of three feet or greater can be abandoned in place if they are deemed not a hazard or interfering with agricultural use or other resource uses of the land.*
- (3) Gravel shall be removed from areas surrounding turbine pads.*
- (4) Private access road areas shall be restored by removing gravel and restoring the surface grade and soil, unless the landowner directs otherwise.*
- (5) After removal of the structures and roads, the area shall be graded as close as is reasonably possible to its original contours and the soils shall be restored to a condition compatible with farm uses or consistent with other resource uses. Re vegetation shall include planting by Wind Power Generation Facility owner/operator of native plant seed mixes, planting by Wind Power Generation Facility owner/operator of plant species suited to the area, or planting by landowner of agricultural crops, as appropriate, and shall be consistent with the weed control plan approved by Umatilla County.*
- (6) Roads, cleared pads, fences, gates, and improvements may be left in place if a letter from the land owner is submitted to Umatilla County indicating said land owner will be responsible for, and will maintain said roads and/or facilities for farm or other purposes as permitted under applicable zoning.*

The restoration required by county code is consistent with the restoration activities the applicant identified in ASC Exhibit W. Based on the tasks and actions proposed for wind facility decommissioning, the Council finds that the facility will comply with criterion.

- (8) Decommissioning Fund. The Wind Power Generation Facility owner/operator shall submit to Umatilla County a bond acceptable to the County, in the amount of the decommissioning fund naming Umatilla County beneficiary or payee.*

- 1 (a) *The calculation of present year dollars shall be made using the U. S. Gross Domestic*
2 *Product Implicit Price Deflator as published by the U. S. Department of Commerce,*
3 *Bureau of Economic Analysis, or any successor agency (the “index”). The amount of the*
4 *bond account shall be changed up or down if the change in the Index moves by more*
5 *than 10 percent from the last change, and then the amount shall be increased or*
6 *decreased by the cumulative percentage change. If at any time the Index is no longer*
7 *published, Umatilla County and the Wind Power Generation Facility owner/operator*
8 *shall select a comparable calculation of present year dollars.*
9 (b) *The bond shall not be subject to revocation or unjustified reduction before*
10 *decommissioning of the Wind Power Generation Facility and rehabilitation of the site/s.*
11 (c) *The Wind Power Generation Facility owner/operator shall describe the status of the*
12 *bond in the annual report submitted to the Umatilla County.*

13
14 As provided at UCDC 152.616(HHH)(7)(m), the bond or letter of credit required by the
15 Council for an energy facility under Council jurisdiction will satisfy the county’s bond
16 requirement.

17
18 Retirement and Financial Assurance Condition 4 will require the applicant to submit to the
19 Council before beginning construction, a bond or letter of credit in a form and amount
20 satisfactory to restore the site to a useful nonhazardous condition upon retirement of the
21 facility. Retirement and Financial Assurance Condition 4 allows the Council to draw on the
22 bond or letter of credit to restore the site to a useful, nonhazardous condition in the event
23 the applicant does not comply with its retirement and decommissioning obligations.

24
25 Subject to compliance with the conditions, the Council finds that the facility will satisfy this
26 criterion.

27
28 (9) *Annual Reporting. Within 120 days after the end of each calendar year the Wind Power*
29 *Generation Facility owner/operator shall provide Umatilla County a written and oral annual*
30 *report including the following information:*

- 31 (a) *Energy production by month and year.*
32 (b) *Non-proprietary information about wind conditions, (e. g., monthly averages, high wind*
33 *events, bursts).*
34 (c) *A summary of changes to the Wind Power Generation Facility that do not require*
35 *amendments.*
36 (d) *A summary of the fish, wildlife and avian monitoring program – bird injuries, casualties,*
37 *positive impacts on area wildlife and any recommendations for changes in the*
38 *monitoring program.*
39 (e) *Employment impacts to the community and Umatilla County during and after*
40 *construction.*
41 (f) *Success or failures of weed control practices.*
42 (g) *Status of the bond.*
43 (h) *Summary of erosion control activities and its effectiveness.*
44 (i) *Summary comments*

- 1 (1) *Problems with the projects, any adjustments needed, or any suggestions.*
2 (2) *The annual report requirement may be modified by the County as warranted by*
3 *project conditions, circumstances and compliance. The reporting requirement and/or*
4 *reporting schedule shall be reviewed, and possibly altered, at the request of the Wind*
5 *Power Generation Facility owner/operator. For Wind Power Generation Facilities*
6 *under EFSC jurisdiction and for which an annual report is required, the annual report*
7 *to EFSC satisfies this requirement.*

8
9 UCDO 152.616(HHH)(9) states that “[f]or Wind Power Generation Facilities under EFSC
10 jurisdiction and for which an annual report is required, the annual report to EFSC satisfies this
11 requirement.” Pursuant to OAR 345-026-0080, an energy facility certificate holder must submit
12 a semiannual construction progress report to the Department during construction and annual
13 reports during every year of operations. As provided, this annual reporting requirement
14 satisfies UCDO 152.616(HHH)(9). Therefore, the Council finds that this criterion is satisfied
15 through compliance with Council’s rule at OAR 345-026-0080.

16
17 **Section 152.617(II)(7) Utility Facility Necessary for Public Service**

18
19 UCDC Section 152.059 establishes that a “utility facility necessary for public service” is a use
20 permitted in EFU-zoned land subject to compliance with ORS 215.275 and UCDC 152.617(II)(7),
21 where UCDC 152.617(II)(7)(A) mirrors ORS 215.275. As described throughout this order, the
22 facility includes three 230 kV transmission lines: the Substation Connector, UEC Cottonwood,
23 and BPA to Stanfield transmission lines. This criterion applies to the proposed 230 kV
24 Substation Connection Transmission Line and the proposed UEC Cottonwood transmission line;
25 the proposed UEC Cottonwood is also evaluated with the BPA Stanfield transmission line under
26 as an “associated transmission line” under UCDC 152.617(II)(7)(B), which mirrors ORS 215.274
27 below.

28
29 The UCDC Section 152.617(II)(7)(A) evaluation is presented separately per proposed 230 kV
30 transmission line.

31
32 **Proposed 230 kV Substation Connector Line**

- 33
34 (A) *A utility facility established under ORS 215.283(1)(c) is necessary for public service if*
35 *the facility must be sited in an exclusive farm use zone in order to provide the service.*
36 *To demonstrate that a utility facility is necessary, an applicant must:*
37 (1) *Demonstrate that reasonable alternatives have been considered and that the*
38 *facility must be sited in an exclusive farm use zone due to one or more of the*
39 *following factors:*

40
41 UCDC 152.617(II)(7)(A)(1) first requires an evaluation of reasonable alternatives to determine
42 whether the utility facility may be sited on land other than EFU-zoned land. Then, following an
43 evaluation of reasonable alternatives on non-EFU zoned land, UCDC 152.617(II)(7) establishes a
44 list of factors, of which at least one must be satisfied, that must be considered to determine

1 whether a utility facility is necessary for public service, and includes standards related to
2 mitigating the impact of the utility facility on farm uses and farm land.

3
4 The proposed 230 kV Substation Connector transmission line will extend approximately 6.8
5 miles from the proposed southern project substation to the northern project substation, as
6 presented in ASC Exhibit K Figure C-5. The applicant does not directly address whether there
7 are reasonable alternatives for the proposed 230 kV Substation Connector transmission line
8 that will be located on non-EFU zoned land. However, it is reasonable to evaluate the
9 availability of alternative transmission routes based on the proposed location of wind turbines
10 and electrical generating components. ASC Exhibit K Figure K-2 Zoning demonstrates that there
11 are non-EFU zoned lands approximately 25 miles from the wind micro-siting area. Because there
12 are no non-EFU zoned lands within a reasonable distance from the proposed wind micro-siting
13 area, the Council finds that there are no reasonable alternatives for the proposed 230 kV
14 Substation Connector transmission line that will be located on non-EFU zoned lands.

15
16 *(a) Information provided in the technical and engineering feasibility;*

17
18 The Council interprets this factor as requiring a demonstration that technical or engineering
19 constraints, such as extreme topographic features, cannot be overcome but for facility
20 engineering through EFU-zoned land.

21
22 Any feasible Substation Connector transmission line route will be located within EFU zoned
23 lands, as evaluated above; non EFU zoned land does not exist within or surrounding the
24 proposed site boundary. Therefore, the Council finds that technical or engineering constraints,
25 such as extreme topographic features, that could not be overcome but for siting the proposed
26 230 kV Substation Connector transmission line through EFU zoned land were not the primary
27 drivers for siting on EFU zoned land. The Council finds that UCDC 152.617(II)(7)(A)(1)(a) would
28 not be satisfied.

29
30 *(b) The proposed facility is locationally dependent. (It must cross land in one or*
31 *more areas zoned for exclusive farm use in order to achieve a reasonably*
32 *direct route or to meet unique geographical needs that cannot be satisfied on*
33 *other lands.)*

34
35 As presented in ASC Exhibit K Figure K-2 Zoning, the majority of the land use analysis area is
36 EFU-zoned land. There is no reasonable way to build a transmission line between the proposed
37 southern project substation and northern project substation without crossing EFU-zoned land
38 while still achieving a reasonably direct route. Therefore, the Council finds that the proposed
39 230 kV Substation Connector transmission line is "locationally dependent" and satisfies UCDC
40 152.617(II)(7)(A)(1)(b)

41
42 *(c) Show a lack of available urban and non-resource lands;*
43

1 As presented in ASC Exhibit K Figure K-2 Zoning, the entirety of the land use analysis area is
2 EFU-zoned land. Therefore, there are no available urban or non-resource lands between the
3 proposed southern project substation and northern project substation. Therefore, the Council
4 finds that the proposed 230 kV Substation Connector transmission line satisfies UCDC
5 152.617(II)(7)(A)(1)(c).

6
7 *(d) Due to availability of existing rights of way.*
8

9 There are no public rights-of-way within the wind micrositing corridor. Therefore, the proposed
10 230 kV Substation Connector transmission line does not have to be sited on EFU-zoned land in
11 order to utilize existing rights of way. The Council finds that the proposed 230 kV Substation
12 Connector transmission line would not satisfy UCDC 152.617(II)(7)(A)(1)(d).

13
14 *(e) Due to public health and safety concerns; and*
15

16 While the applicant states that the proposed transmission line will not be located near any
17 residences or occupied structures, it does not address how or why the line will need to be sited
18 on EFU-zoned land to avoid public health and safety concerns otherwise present. The Councils
19 find that the proposed 230 kV Substation Connector transmission line would not satisfy UCDC
20 152.617(II)(7)(A)(1)(e).

21
22 *(f) Show it must meet other requirements of state and federal agencies.*
23

24 While the applicant explains that the facility would comply with other requirements of state
25 and federal agencies, it does not address the criterion. Therefore, the Council finds that the
26 proposed 230 kV Substation Connector transmission line would not satisfy UCDC
27 152.617(II)(7)(A)(1)(f).

28
29 *(2) Costs associated with any of the factors listed in subsection (A) above may be*
30 *considered, but cost alone, including the cost of land, may not be the only*
31 *consideration in determining that a utility facility is necessary for public service.*
32 *Land costs shall not be included when considering alternative locations for*
33 *substantially similar utility facilities and the siting of utility facilities that are not*
34 *substantially similar.*
35

36 The applicant does not rely on this factor. Therefore, the Council finds that the proposed 230 kV
37 Substation Connector transmission line would not satisfy UCDC 152.617(II)(7)(A)(2).

38
39 *(3) The owner of a utility facility approved under this section shall be responsible for*
40 *restoring, as nearly as possible, to its former condition any agricultural land and*
41 *associated improvements that are damaged or otherwise disturbed by the siting,*
42 *maintenance, repair or reconstruction of the facility. Nothing in this paragraph*
43 *shall prevent the owner of the utility facility from requiring a bond or other*

1 *security from a contractor or otherwise imposing on a contractor the*
2 *responsibility for restoration.*

3
4 The applicant will be responsible for all areas temporarily disturbed during construction,
5 maintenance or repair of the proposed wind facility, including the components that will be
6 located on EFU-zoned land. As evaluated in Section IV.H. *Fish and Wildlife Habitat* and IV.G.
7 *Retirement and Financial Assurance* of this order, Fish and Wildlife Habitat Conditions 1, 2 and 3
8 will require that temporarily disturbed vegetation is restored to its pre-disturbance condition;
9 and Retirement and Financial Assurance Condition 4 will ensure that, prior to construction, the
10 applicant obtain and submit to the Department a bond or letter of credit based on an amount
11 be considered by Council as satisfactory for facility decommissioning. The bond or letter of
12 credit will remain in effect until the facility is decommissioned to provide assurance to the
13 State, in the event the applicant is unable to fulfil its decommissioning obligations. Then, upon
14 facility decommissioning, the applicant will be required to decommission the facility in
15 accordance with a Council approved decommissioning plan. Based on compliance with the
16 above-described conditions, the Council finds that the proposed 230 kV Substation Connector
17 transmission line will satisfy this criterion.

18
19 *(4) The governing body of the county or its designee shall impose clear and objective*
20 *conditions on an application for utility facility siting to mitigate and minimize the*
21 *impacts of the proposed facility, if any, on surrounding lands devoted to farm use*
22 *in order to prevent a significant change in accepted farm practices or a*
23 *significant increase in the cost of farm practices on surrounding farmlands.*

24
25 The Council imposes the following conditions that will ensure minimization of potential impacts
26 from proposed transmission construction and operation to accepted farm practices:

- 27
28
 - Soil Protection Conditions 1 and 2 will require consultation with the Umatilla County Soil
29 and Water Conservation District, prior to construction, and will require implementation
30 of best management practices to minimize and monitor for offsite erosion impacts
 - Soil Protection Condition 3 will require that, during operations, the applicant implement
31 a Soil Monitoring Plan that will evaluate and mitigate for topsoil loss and erosion
32 impacts resulting from construction
 - Soil Protection Conditions 4, 5 and 7 will require that the applicant adhere to the
33 requirements of an SPCC during construction and operation, to minimize any potential
34 impacts from soil contamination
 - Fish and Wildlife Conditions 1, 2 and 3 will require that the applicant implement and
35 adhere to the requirements of a Revegetation and Noxious Weed Plan, prior to and
36 during construction and operation, including long-term revegetation and noxious weed
37 control.
 - Public Services Condition 1 will require implementation of a Traffic Management Plan
38 and execution of a Road Use Agreement with Umatilla County Public Works
39 Department, which will minimize potential traffic and dust-related impacts.

40
41
42
43

- Land Use Conditions 2 and 3 will require implementation of an Agricultural Mitigation Plan that will require that the applicant demonstrate completion of landowner consultation on facility design and construction methods, and that the applicant follow-through with any commitments on siting facility components to minimize agricultural impacts and provide adequate compensation for loss of agriculturally productive lands.

Based on the above recommended findings of facts and reasoning, and compliance with the above-referenced conditions, the Council finds that the applicant has provided sufficient analysis required under UCDC Section 152.617(II)(7)(A)(1)(b) and (c) that the proposed 230 kV Substation Connector transmission line must be sited on EFU-zoned land because it is locationally dependent and due to a lack of available urban and nonresource lands. As such, the Council finds that the transmission line is “necessary for public service.”

Proposed 230 kV UEC Cottonwood Transmission Line

(A) A utility facility established under ORS 215.283(1)(c) is necessary for public service if the facility must be sited in an exclusive farm use zone in order to provide the service.

To demonstrate that a utility facility is necessary, an applicant must:

(1) Demonstrate that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the following factors:

The proposed 230 kV UEC Cottonwood transmission line will extend approximately 25.3 miles from the proposed northern project substation to the existing UEC Cottonwood Substation. The line will include 8.4 miles of new line, 9.6 miles of replacement line, and 7.3 miles of upgraded line. Approximately 23 miles of the proposed transmission line will be located within EFU-zoned land; the remaining northern portion of the route will be located within RTC, LI and AB zoned lands.

The route of the proposed UEC Cottonwood transmission line allows for interconnection of the proposed northern project substation to two existing structures – UEC Transmission Network Junction (located on the corner of White House Road and County Road 1348) and the UEC Cottonwood Substation (north of the I-84 crossing location). The proposed northern project substation and UEC Transmission Network Junction are located within EFU-zoned lands; the existing UEC Cottonwood Substation is located in the LI zone. ASC Exhibit K Figure K-2 Zoning demonstrates that there are no non-EFU zoned lands between the wind, solar and transmission line site boundary area or within ½-mile of these areas, except for the northern 2-miles of the transmission line route which is over 23 miles from the location of proposed energy generation equipment. Because there are no non-EFU zoned lands within ½-mile of the portions of the site boundary containing the wind and solar micro-siting areas or for the majority (approximately 23 miles) of the transmission line site boundary, the Council finds that there are no reasonable alternatives for the proposed 230 kV UEC Cottonwood transmission line that will be located on non-EFU zoned lands.

1 (a) *Information provided in the technical and engineering feasibility;*

2
3 The Council interprets this factor as requiring a demonstration that technical or engineering
4 constraints, such as extreme topographic features, cannot be overcome but for facility
5 engineering through EFU-zoned land.
6

7 Any feasible UEC Cottonwood transmission line route will be located within EFU zoned lands, as
8 evaluated above; non EFU zoned land does not exist within or surrounding the proposed site
9 boundary, except for the northern most portion of the proposed UEC Cottonwood transmission
10 line route located over 23 miles from the site of the proposed energy generation components.
11 Therefore, the Council finds that technical or engineering constraints, such as extreme
12 topographic features, that could not be overcome but for siting the proposed 230 kV UEC
13 Cottonwood transmission line through EFU zoned land were not the primary drivers for siting
14 on EFU zoned land. The Council finds that UCDC 152.617(II)(7)(A)(1)(a) would not be satisfied.
15

16 (b) *The proposed facility is locationally dependent. (It must cross land in one or more*
17 *areas zoned for exclusive farm use in order to achieve a reasonably direct route*
18 *or to meet unique geographical needs that cannot be satisfied on other lands.)*
19

20 As presented in ASC Exhibit K Figure K-2 Zoning, with the exception of a short 2-mile segment
21 over 23 miles from the proposed site boundary, the entirety of the land use analysis area is
22 EFU-zoned land. There is no reasonable way to build a transmission line between the proposed
23 northern project substation and UEC Cottonwood Substation without crossing EFU-zoned land
24 while still achieving a reasonably direct route. Therefore, the Council finds that the proposed
25 UEC Cottonwood transmission line is "locationally dependent" and satisfies UCDC
26 152.617(II)(7)(A)(1)(b)
27

28 (c) *Show a lack of available urban and non-resource lands;*
29

30 As presented in ASC Exhibit K Figure K-2 Zoning, the majority of the land use analysis area is
31 EFU-zoned land. There are no available urban or non-resource lands between or in reasonable
32 proximity to the proposed northern project substation to the existing UEC Cottonwood
33 Substation. Therefore, the Council finds that the proposed UEC Cottonwood transmission line
34 satisfies UCDC 152.617(II)(7)(A)(1)(c).
35

36 (d) *Due to availability of existing rights of way.*
37

38 The proposed UEC Cottonwood transmission line will require new or expanded rights-of-way.
39 There are no existing, available rights-of-way identified that could be used by the proposed
40 transmission line. Therefore, the proposed UEC Cottonwood transmission line does not have to
41 be sited on EFU-zoned land in order to utilize existing rights of way. The Council finds that the
42 proposed UEC Cottonwood transmission line would not satisfy UCDC 152.617(II)(7)(A)(1)(d).
43

44 (e) *Due to public health and safety concerns; and*

1
2 The applicant does not rely on this factor. The Council finds that the proposed UEC Cottonwood
3 transmission line would not satisfy UCDC 152.617(II)(7)(A)(1)(e).

4
5 *(f) Show it must meet other requirements of state and federal agencies.*
6

7 While the applicant explained that the proposed UEC Cottonwood transmission line would
8 comply with other requirements of state and federal agencies, it does not address the criterion.
9 The Council finds that the proposed UEC Cottonwood transmission line would not satisfy UCDC
10 152.617(II)(7)(A)(1)(f).

11
12 *(2) Costs associated with any of the factors listed in subsection (A) above may be*
13 *considered, but cost alone, including the cost of land, may not be the only*
14 *consideration in determining that a utility facility is necessary for public service.*
15 *Land costs shall not be included when considering alternative locations for*
16 *substantially similar utility facilities and the siting of utility facilities that are not*
17 *substantially similar.*
18

19 The applicant does not rely on this factor. The Council finds that the proposed UEC Cottonwood
20 transmission line would not satisfy UCDC 152.617(II)(7)(A)(2).

21
22 *(3) The owner of a utility facility approved under this section shall be responsible for*
23 *restoring, as nearly as possible, to its former condition any agricultural land and*
24 *associated improvements that are damaged or otherwise disturbed by the siting,*
25 *maintenance, repair or reconstruction of the facility. Nothing in this paragraph*
26 *shall prevent the owner of the utility facility from requiring a bond or other*
27 *security from a contractor or otherwise imposing on a contractor the*
28 *responsibility for restoration.*
29

30 The applicant will be responsible for all areas temporarily disturbed during construction,
31 maintenance or repair of the proposed wind facility, including the components that will be
32 located on EFU-zoned land. As evaluated in Section IV.H. *Fish and Wildlife Habitat* and IV.G.
33 *Retirement and Financial Assurance* of this order, Fish and Wildlife Habitat Condition 1 will
34 require that temporarily disturbed vegetation is restored to its pre-disturbance condition; and
35 Retirement and Financial Assurance Condition 4 will ensure that, prior to construction, the
36 applicant obtain and submit to the Department a bond or letter of credit based on an amount
37 be considered by Council as satisfactory for facility decommissioning. The bond or letter of
38 credit will remain in effect until the facility is decommissioned to provide assurance to the
39 State, in the event the applicant is unable to fulfil its decommissioning obligations. Then, upon
40 facility decommissioning, the applicant will be required to decommission the facility in
41 accordance with a Council approved decommissioning plan.

42
43 In addition, the Council imposes a condition requiring that all applicant representations that will
44 minimize and mitigate temporary and permanent impacts to agricultural lands be incorporated

1 into an Agricultural Mitigation Plan and required to be implemented under Land Use Conditions
2 2 and 3.

3
4 Based on compliance with the above-described conditions, the Council finds that the proposed
5 UEC Cottonwood transmission line will satisfy this criterion.

6
7 *(4) The governing body of the county or its designee shall impose clear and objective*
8 *conditions on an application for utility facility siting to mitigate and minimize the*
9 *impacts of the proposed facility, if any, on surrounding lands devoted to farm use*
10 *in order to prevent a significant change in accepted farm practices or a*
11 *significant increase in the cost of farm practices on surrounding farmlands.*

12
13 The Council imposes the following conditions that will ensure minimization of potential impacts
14 from proposed transmission construction and operation to accepted farm practices:

- 15
16 • Soil Protection Conditions 1 and 2 will require consultation with the Umatilla County Soil
17 and Water Conservation District, prior to construction, and will require implementation
18 of best management practices to minimize and monitor for offsite erosion impacts
- 19 • Soil Protection Condition 3 will require that, during operations, the applicant implement
20 a Soil Monitoring Plan that will evaluate and mitigate for topsoil loss and erosion
21 impacts resulting from construction
- 22 • Soil Protection Conditions 4, 5 and 7 will require that the applicant adhere to the
23 requirements of an SPCC during construction and operation, to minimize any potential
24 impacts from soil contamination
- 25 • Fish and Wildlife Conditions 1, 2 and 3 will require that the applicant implement and
26 adhere to the requirements of a Revegetation and Noxious Weed Plan, prior to and
27 during construction and operation, including long-term revegetation and noxious weed
28 control.
- 29 • Public Services Condition 1 will require implementation of a Traffic Management Plan
30 and execution of a Road Use Agreement with Umatilla County Public Works
31 Department, which will minimize potential traffic and dust-related impacts.
- 32 • Land Use Conditions 2 and 3 will require implementation of an Agricultural Mitigation
33 Plan that will require that the applicant demonstrate completion of landowner
34 consultation on facility design and construction methods, and that the applicant follow-
35 through with any commitments on siting facility components to minimize agricultural
36 impacts and provide adequate compensation for loss of agriculturally productive lands.

37
38 Based on the above findings of facts and reasoning, and compliance with the conditions, the
39 Council finds that the applicant has provided sufficient analysis required under UCDC Section
40 152.617(II)(7)(A)(1)(b) and (c) that the proposed UEC Cottonwood transmission line must be
41 sited on EFU-zoned land because it is locationally dependent and due to a lack of available
42 urban and nonresource lands. As such, the Council finds that the transmission line is “necessary
43 for public service.”

1
2 UCDC Section 152.617(II)(7)(B)
3

4 *(B) An associated transmission line is necessary for public service and shall be*
5 *approved by the governing body of a county or its designee if an applicant for*
6 *approval under ORS 215.283(1)(c) demonstrates to the governing body of the*
7 *county or its designee that the associated transmission line meets either the*
8 *requirements of paragraph (1) of this subsection or the requirements of*
9 *paragraph (2) of this subsection.*

10
11 Transmission lines that meet the definition of an “associated transmission line” must consider
12 the requirements of ORS 215.274. If a utility facility necessary for public service is an
13 “associated transmission line” as defined in ORS 215.274 and ORS 469.300, the use may be
14 established in EFU-zoned land pursuant to ORS 215.283(c). ORS 469.300(3) defines “associated
15 transmission lines” as “new transmission lines constructed to connect an energy facility to the
16 first point of junction of such transmission line or lines with either a power distribution system
17 or an interconnected primary transmission system or both or to the Northwest Power Grid,”
18 and that definition is incorporated by reference in ORS 215.274. Associated transmission lines
19 reviewed under ORS 215.274 are a subset of the transmission lines that could be evaluated as
20 utility facilities necessary for public service under ORS 215.283(1)(c). In ASC Exhibit K, the
21 applicant explains that the proposed UEC Cottonwood and BPA Stanfield transmission lines,
22 connecting the facility to a UEC and BPA substation, respectively, meets the definition of
23 “associated transmissions lines” because it will ultimately connect to the Northwest power grid.
24 The Council concurs and evaluates the proposed transmission line segment as an “associated
25 transmission line.”

26
27 The UCDC Section 152.617(II)(7)(B) evaluation is presented separately per proposed 230 kV
28 transmission line.

29
30 Proposed 230 kV UEC Cottonwood Transmission Line
31

- 32 *(1) An applicant demonstrates that the entire route of the associated transmission line*
33 *meets at least one of the following requirements:*
34 *(a) The associated transmission line is not located on high value farmland, as defined in*
35 *ORS 195.300, or on arable land;*
36 *(b) The associated transmission line is co-located with an existing transmission line;*
37 *(c) The associated transmission line parallels an existing transmission line corridor with*
38 *the minimum separation necessary for safety; or*
39 *(d) The associated transmission line is located within an existing right of way for a linear*
40 *facility, such as a transmission line, road or railroad that is located above the surface*
41 *of the ground.*
42

1 The proposed 230 kV UEC Cottonwood transmission line would not satisfy any of the criteria
2 under UCDC Section 152.617(II)(7)(B)(1). UCDC Section 152.617(II)(7)(B) allows for
3 consideration of requirements under (1) or (2). The evaluation under (2) is presented below.

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

8
9 The proposed 230 kV UEC Cottonwood transmission line would extend approximately 25.3
10 miles from the proposed northern project substation to the existing UEC Cottonwood
11 Substation. The line would include 8.4 miles of new line, 9.6 miles of replacement line, and 7.3
12 miles of upgraded line. Approximately 23 miles of the proposed transmission line would be
13 located within high-value farmland in EFU-zoned land; the remaining northern portion of the
14 route would also be located in high-value farmland, as well as within RTC, LI and AB zoned
15 lands.

16
17 The route of the proposed UEC Cottonwood transmission line allows for interconnection of the
18 proposed northern project substation to two existing structures – UEC Transmission Network
19 Junction (located on the corner of White House Road and County Road 1348) and the UEC
20 Cottonwood Substation (north of the I-84 crossing location). The proposed northern project
21 substation and UEC Transmission Network Junction are located within EFU-zoned lands; the
22 existing UEC Cottonwood Substation is located in the LI zone. ASC Exhibit K Figure K-2 Zoning
23 demonstrates that there are no non-EFU zoned lands between the wind, solar and transmission
24 line site boundary area or within ½-mile of these areas, except for the northern 2-miles of the
25 transmission line route which is over 23 miles from the location of proposed energy generation
26 equipment. Because there are no non-EFU zoned lands within ½-mile of the portions of the site
27 boundary containing the wind and solar micro-siting areas or for the majority (approximately 23
28 miles) of the transmission line site boundary, the Council finds that there are no reasonable
29 alternatives for the proposed 230 kV UEC Cottonwood transmission line that would be located
30 on non-high value farmland or non-EFU zoned lands.

31
32 *(a) Technical and engineering feasibility;*

33
34 The Council interprets this factor as requiring a demonstration that technical or engineering
35 constraints, such as extreme topographic features, cannot be overcome but for facility
36 engineering through high value farmland.

37
38 Any feasible UEC Cottonwood transmission line route would be located within high value
39 farmland, as evaluated above; non high value farmland does not exist within or surrounding the
40 proposed site boundary, except for the northern most portion of the proposed UEC
41 Cottonwood Transmission Line route located over 23 miles from the site of the proposed
42 energy generation components. Therefore, the Council finds that technical or engineering
43 constraints, such as extreme topographic features, that could not be overcome but for siting

1 the proposed 230 kV UEC Cottonwood transmission line through high value farmland were not
2 the primary drivers for siting. The Council finds that UCDC 152.617(II)(7)(B)(2)(a) would not be
3 satisfied.

4
5 *(b) The associated transmission line is locationally dependent because the associated*
6 *transmission line must cross high-value farmland, as defined in ORS 195.300, or*
7 *arable land to achieve a reasonably direct route or to meet unique geographical*
8 *needs that cannot be satisfied on other lands;*
9

10 As presented in ASC Exhibit K Figures K-5 through K-5.12, the entirety of the proposed UEC
11 Cottonwood Transmission Line corridor and area extending ½-mile from the corridor is
12 significantly interspersed with high-value farmland. Given the extent of high-value farmland
13 within ½-mile of the transmission line corridor, there is no reasonable way to build the line
14 between the proposed northern project substation and UEC Cottonwood Substation without
15 crossing high-value farmland while still achieving a reasonably direct route. Therefore, the
16 Council finds that the proposed UEC Cottonwood Transmission Line is “locationally dependent”
17 and satisfies UCDC 152.617(II)(7)(B)(2)(b).

18
19 *(c) Lack of an available existing right of way for a linear facility, such as a transmission*
20 *line, road or railroad, that is located above the surface of the ground;*
21

22 ASC Exhibit C Figures C-4.1 through C-4.10 and ASC Exhibit K Figures K-5.1 through K-5.10, in
23 combination, present the proposed UEC Cottonwood transmission line route and existing
24 Umatilla County Road ROW. The applicant asserts that there is limited existing rights-of-way
25 within the site boundary and surrounding lands, and that the existing road right-of-way along
26 the transmission line route follows gullies and canyons associated with streams and does not
27 provide a feasible transmission line route. In ASC Exhibit B, the applicant affirms that right-of-
28 way acquisition would be required in order to site the line within the existing right-of-way.
29 Therefore, the Council finds that there is a lack of available existing rights-of-way for siting of
30 the proposed 230 kV UEC Cottonwood transmission line; UCDC 152.617(II)(7)(B)(2)(c) is
31 satisfied.

32
33 *(d) Public health and safety; or*

34 *(e) Other requirements of state or federal agencies.*
35

36 The applicant does not rely on UCDC 152.617(II)(7)(B)(2)(d) or (e).
37

38 *(3) As pertains to paragraph (2), the applicant shall present findings to the governing body*
39 *of the county or its designee on how the applicant will mitigate and minimize the*
40 *impacts, if any, of the associated transmission line on surrounding lands devoted to farm*
41 *use in order to prevent a significant change in accepted farm practices or a significant*
42 *increase in the cost Umatilla County Development Code, Revision Date May 5, 2021,*
43 *Page 386 of 467 of farm practices on the surrounding farmland.*
44

Applicant commits to designing the proposed UEC Cottonwood transmission line route to run along the edge of existing fields and would ensure that underlying landowners would continue to have access to agricultural lands.

The Council imposes the following conditions that would ensure minimization of potential impacts from proposed transmission construction and operation to accepted farm practices:

- Soil Protection Conditions 1 and 2 would require consultation with the Umatilla County Soil and Water Conservation District, prior to construction, and would require implementation of best management practices to minimize and monitor for offsite erosion impacts
- Soil Protection Condition 3 would require that, during operations, the applicant implement a Soil Monitoring Plan that would evaluate and mitigate for topsoil loss and erosion impacts resulting from construction
- Soil Protection Conditions 4, 5 and 7 would require that the applicant adhere to the requirements of an SPCC during construction and operation, to minimize any potential impacts from soil contamination
- Fish and Wildlife Condition 1, 2 and 3 would require that the applicant implement and adhere to the requirements of a Revegetation and Noxious Weed Plan, prior to and during construction and operation, including long-term revegetation and noxious weed control.
- Public Services Condition 1 would require implementation of a Traffic Management Plan and execution of a Road Use Agreement with Umatilla County Public Works Department, which would minimize potential traffic and dust-related impacts.
- Land Use Conditions 2 and 3 would require implementation of an Agricultural Mitigation Plan that would require that the applicant demonstrate completion of landowner consultation on facility design and construction methods, and that the applicant follow-through with any commitments on siting facility components to minimize agricultural impacts and provide adequate compensation for loss of agriculturally productive lands.

Based on the above representations and compliance with conditions, the Council finds that the proposed 230 kV UEC Cottonwood transmission line would not result in a significant change in accepted farm practices or a significant increase in cost of farm practices on surrounding land. Therefore, the Council finds that the proposed 230 kV UEC Cottonwood transmission line would satisfy UCDC 152.617(II)(7)(B)(3).

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

Costs were not a consideration in determining the location of the proposed UEC Cottonwood transmission line route.

For the above stated reasons, the Council finds that the applicant has provided sufficient analysis required under UCDC 152.617(II)(7)(B) that the proposed UEC Cottonwood transmission line, as an associated transmission line, must be sited on high value farmland because it is “locationally dependent” and due to a lack of available existing rights-of-way. As such, the Council finds that the associated transmission line is “an associated transmission line.”

Proposed 230 kV BPA Stanfield Transmission Line

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

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

The proposed 230 kV BPA Stanfield transmission line would not satisfy any of the criteria under UCDC Section 152.617(II)(7)(B)(1). UCDC Section 152.617(II)(7)(B) allows for consideration of requirements under (1) or (2). The evaluation under (2) is presented below.

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

The proposed 230 kV BPA Stanfield transmission line would extend approximately 5 miles from the proposed northern project substation to the proposed BPA Stanfield Substation. The transmission line route and high value farmland are presented in ASC Exhibit K Figures K-5.11 through K-5.14. Based on these figures, the entirety of the transmission line corridor and surrounding analysis area is within, or significantly interspersed with, high-value farmland.

The route of the proposed 230 kV BPA Stanfield transmission line allows for interconnection of the facility to a BPA substation, which the applicant represents is a fixed location. Because there are no non-high-value farmlands within ½-mile of the portions of the site boundary containing the wind and solar micro siting areas or for the proposed 230 kV BPA Stanfield transmission line site boundary, the Council finds that there are no reasonable alternatives for the proposed 230 kV BPA Stanfield transmission line that would be located on non highvalue farmlands.

(a) Technical and engineering feasibility;

1 The Council interprets this factor as requiring a demonstration that technical or engineering
2 constraints, such as extreme topographic features, cannot be overcome but for facility
3 engineering through high value farmland.

4
5 Any feasible 230 kV BPA Stanfield transmission line would be located within high value
6 farmland, as evaluated above; non high value farmland does not exist within or surrounding the
7 proposed site boundary, except for the northern most portion of the proposed UEC
8 Cottonwood Transmission Line route located over 23 miles from the site of the proposed
9 energy generation components. Therefore, the Council finds that technical or engineering
10 constraints, such as extreme topographic features, that could not be overcome but for siting
11 the proposed 230 kV BPA Stanfield transmission line through high value farmland were not the
12 primary drivers for siting. The Council finds that UCDC 152.617(II)(7)(B)(2)(a) would not be
13 satisfied.

14
15 *(b) The associated transmission line is locationally dependent because the associated*
16 *transmission line must cross high-value farmland, as defined in ORS 195.300, or*
17 *arable land to achieve a reasonably direct route or to meet unique geographical*
18 *needs that cannot be satisfied on other lands;*

19
20 As presented in ASC Exhibit K Figures K-5.11 through K-5.14, the entirety of the proposed 230
21 kV BPA Stanfield transmission line and area extending ½-mile from the corridor is significantly
22 interspersed with high-value farmland. Given the extent of high-value farmland within ½-mile
23 of the transmission line corridor, there is no reasonable way to build the line between the
24 proposed northern project substation and proposed BPA Substation without crossing high-
25 value farmland while still achieving a reasonably direct route. Therefore, the Council finds that
26 the proposed 230 kV BPA Stanfield transmission line is “locationally dependent” and satisfies
27 UCDC 152.617(II)(7)(B)(2)(b).

28
29 *(c) Lack of an available existing right of way for a linear facility, such as a transmission*
30 *line, road or railroad, that is located above the surface of the ground;*

31
32 The proposed 230 kV BPA Stanfield transmission line has been designed to parallel existing BPA
33 transmission and road rights-of-way, but the size of the existing rights-of-way is not sufficient to
34 provide for minimum separation distance. If this route is selected at final design, the applicant
35 would obtain a new right-of-way immediately adjacent to BPA’s right-of-way. Because the
36 applicant is minimizing impacts by paralleling existing corridors, but those corridors do not
37 contain available rights-of-way for siting of the line, the Council finds that there is a lack of
38 available existing rights-of-way for siting of the proposed 230 kV BPA Stanfield transmission
39 line; UCDC 152.617(II)(7)(B)(2)(c) is satisfied.

40
41 *(d) Public health and safety; or*
42 *(e) Other requirements of state or federal agencies.*

43
44 The applicant does not rely on UCDC 152.617(II)(7)(B)(2)(d) or (e).

1
2 (3) *As pertains to paragraph (2), the applicant shall present findings to the governing body*
3 *of the county or its designee on how the applicant will mitigate and minimize the*
4 *impacts, if any, of the associated transmission line on surrounding lands devoted to farm*
5 *use in order to prevent a significant change in accepted farm practices or a significant*
6 *increase in the cost Umatilla County Development Code, Revision Date May 5, 2021,*
7 *Page 386 of 467 of farm practices on the surrounding farmland.*
8

9 Applicant commits to designing the proposed BPA Stanfield transmission line by siting the line
10 adjacent to existing rights-of-way. The applicant commits to compensating landowners for any
11 loss of land used for agricultural production.
12

13 The Council imposes the following conditions that would ensure minimization of potential
14 impacts from proposed transmission construction and operation to accepted farm practices:
15

- 16 • Soil Protection Condition 1 and 2 would require consultation with the Umatilla County
17 Soil and Water Conservation District, prior to construction, and would require
18 implementation of best management practices to minimize and monitor for offsite
19 erosion impacts
- 20 • Soil Protection Condition 3 would require that, during operations, the applicant
21 implement a Soil Monitoring Plan that would evaluate and mitigate for topsoil loss and
22 erosion impacts resulting from construction
- 23 • Soil Protection Condition 4, 5 and 7 would require that the applicant adhere to the
24 requirements of an SPCC during construction and operation, to minimize any potential
25 impacts from soil contamination
- 26 • Fish and Wildlife Condition 1 would require that the applicant implement and adhere to
27 the requirements of a Revegetation and Noxious Weed Plan, prior to and during
28 construction and operation, including long-term revegetation and noxious weed control.
- 29 • Public Services Condition 1 would require implementation of a Traffic Management Plan
30 and execution of a Road Use Agreement with Umatilla County Public Works
31 Department, which would minimize potential traffic and dust-related impacts.
- 32 • Land Use Conditions 2 and 3 would require implementation of an Agricultural Mitigation
33 Plan that would require that the applicant demonstrate completion of landowner
34 consultation on facility design and construction methods, and that the applicant follow-
35 through with any commitments on siting facility components to minimize agricultural
36 impacts and provide adequate compensation for loss of agriculturally productive lands.
37

38 Based on the above representations and compliance with conditions, the Council finds that the
39 proposed 230 kV BPA Stanfield transmission line would not result in a significant change in
40 accepted farm practices or a significant increase in cost of farm practices on surrounding land.
41 Therefore, the Council finds that the proposed 230 kV BPA Stanfield transmission line would
42 satisfy UCDC 152.617(II)(7)(B)(3).
43

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

5
6 Costs were not a significant consideration in determining the location of the proposed UEC
7 Cottonwood transmission line route.

8
9 For the above stated reasons, the Council finds that the applicant has provided sufficient
10 analysis required under UCDC 152.617(II)(7)(B) that the proposed UEC BPA Stanfield
11 transmission line, as an associated transmission line, must be sited on high value farmland
12 because it is “locationally dependent”. As such, the Council finds that the proposed 230 kV BPA
13 Stanfield transmission line is “an associated transmission line.”

14
15 **IV.E.1.c Goal 3 Exception**

16
17 The proposed solar facility components would use, occupy or cover approximately 242 acres of
18 high-value farmland¹⁵³ and 1,840 acres of arable land. Therefore, the proposed solar facility
19 components would not comply with OAR 660-033-0130(38)(g) and (i), which prohibit a
20 photovoltaic solar power generation facility from using, occupying or covering more than 12
21 acres of high-value farmland or 20 acres of arable land, respectively. Pursuant to OAR 345-022-
22 0030(2)(b)(B), if a proposed facility does not comply with an applicable substantive criterion,
23 the proposed facility must otherwise comply with the applicable statewide planning goal (here,
24 Goal 3 Agricultural Lands) or seek an exception to the statewide planning goal. Pursuant to ORS
25 469.504(1)(b)(B), non-compliance with a statewide planning goal requires a determination by
26 the Council that an exception to the goal is warranted under ORS 469.504(2).

27
28 The Council’s Land Use standard at OAR 345-022-0030(4), repeats the language of ORS
29 469.504(2), stating:

30
31 (4) *The Council may find goal compliance for a facility that does not otherwise comply with*
32 *one or more statewide planning goals by taking an exception to the applicable goal.*
33 *Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining*
34 *to the exception process or any rules of the Land Conservation and Development*
35 *Commission pertaining to the exception process goal, the Council may take an exception to a*
36 *goal if the Council finds:*

- 37 (a) *The land subject to the exception is physically developed to the extent that the*
38 *land is no longer available for uses allowed by the applicable goal;*
39 (b) *The land subject to the exception is irrevocably committed as described by the*
40 *rules of the Land Conservation and Development Commission to uses not allowed*
41 *by the applicable goal because existing adjacent uses and other relevant factors*
42 *make uses allowed by the applicable goal impracticable; or*

153 High-value farmland per ORS 195.300(10)(f)

1 (c) *The following standards are met:*

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

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

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

10
11 The applicant has not sought an exception under OAR 345-022-0030(4)(a) or (b). In ASC Exhibit
12 K, the applicant provides an assessment as to why a goal exception is appropriate for the
13 proposed solar facility under OAR 345- 022-0030(4)(c). Based on the evaluation presented
14 below, the Council finds that a goal exception under OAR 345-022-0030(4)(c) is appropriate.

15
16 Reasons Supporting an Exception

17
18 Under OAR 345-022-0030(4)(c)(A) (and ORS 469.504(2)(c)(A)), for the Council to determine
19 whether to grant an exception to a statewide planning goal, the applicant must provide reasons
20 justifying why the state policy embodied in the applicable goal should not apply. The state
21 policy embodied in Goal 3 is the preservation and maintenance of agricultural land for farm
22 use. The applicant's arguments relating to "reasons supporting an exception" are discussed
23 below. The reasons determined as justified for taking a "reasons" exception are evaluated in
24 combination, but are first evaluated individually. See the conclusion under the heading
25 "Summary of Reasons Determined as Justifiable."

26
27 *Minimal Impacts to Agriculture*

28
29 The applicant asserts that the proposed solar facility would have minimal impacts to agriculture
30 based on: minimal direct loss of agricultural lands within Umatilla County, minimal impacts on
31 remaining farm operations within the subject tracts, minimal impacts on surrounding
32 agricultural lands, and lack of water availability. The Council presents an evaluation of the
33 applicant's facts and reasoning below.

34
35 *Minimal Direct Loss of Agricultural Land in Umatilla County*

36
37 The proposed solar micrositing area would remove up to 1,896 acres of actively cultivated
38 dryland winter wheat from production in Umatilla County. Based on U.S. Department of
39 Agriculture Census data and Oregon Department of Agriculture data, this acreage represents
40 the following in terms of percentage of lands in Umatilla County:

- 41 • 1,896 of 227,300 acres of dryland wheat harvested in 2019 = 0.8%
- 42 • 1,896 of 406,088 acres of harvested crops in 2017 = 0.5%
- 43 • 1,896 of 815,962 acres of cropland in 2017 = 0.2%
- 44 • 1,896 of 1,352,241 acres of land in Exclusive Farm Use zoned land in 2017 = 0.1%

1
2 The Council reviewed the sources of the data and validated that the acreages referenced for
3 Umatilla County are accurate. The Council finds that a percentage conversion of lands ranging
4 from 0.1 to 0.8% is low and supports, in part, a basis that impacts of using 1,896 acres of EFU-
5 zoned land used for dryland winter wheat in Umatilla County would represent a minimal impact
6 to agriculture.

7
8 *Minimal Direct Impacts within Subject Tracts*
9

10 On a tract-level, the removal of 1,896 acres from cultivation represents the following
11 percentages:

- 12 • 1,896 of 28,138 acres on Tracts 3, 8, 11 and 14 = 6.7%
- 13 • 1,896 acres = 37.8% of dryland winter wheat on subject tracts

14
15 Applicant argues that the above percentages are minimal. The Council agrees that the
16 percentages are less than 50% of the lands on the subject tracts but does not agree that
17 percentages alone are sufficient to evaluate the extent of the impact on the subject tracts. The
18 Council does not have information on yields or cultivation history of the subject tracts which
19 would support an evaluation of whether 6.7% or 37.8% represents a significant impact on the
20 subject tracts. For these reasons, the Council does not rely on this information for the “minimal
21 impacts to agriculture” reason.

22
23 *Minimal Impact on Remaining Farm Operation*
24

25 The underlying landowner of the proposed solar micrositing area is the Cunningham Sheep
26 Company/Pendleton Ranches. On an individual landowner level, based on land ownership
27 within the county, the removal of 1,896 acres from cultivation represents the following
28 percentage:

- 29 • 1,896 of 73,000 acres = 2.5%

30
31 Steven H. Corey of Cunningham Sheep Company affirmed that the proposed solar facility would
32 result in valuable lease payments that would allow his family to intensify agricultural practices
33 on land surrounding the project boundary. Mr. Corey provided numerous statements the
34 Council weighed and considered as substantially supportive evidence in the evaluation of this
35 reason. He stated:

- 36
37 • We are confident the project’s location in this area will not negatively impact our
38 existing use of our land surrounding the solar project boundary or overall success of our
39 ranching and farming operations
- 40 • The project will enable us to support and improve our farming and ranching operations
41 in the surrounding areas by providing valuable lease payments we can invest in ongoing
42 activities on more active land elsewhere on our property

- We intend to devote lease revenues in part to improve housing for our sheep herders as well as farm employees in the cattle and farming departments. The lease payments projected exceed the potential revenues from the current dryland wheat production on the project boundary today. With board approval we may also acquire, clean up and refurbish a contiguous agriculture-related business to strengthen the diversity base of our legacy team. The lease payments exceed the potential revenues from the current dryland wheat production on the project boundary today.
- The project will not result in any loss of employees from our operations. To the contrary, we expect to add agricultural jobs to our payroll based on the lease payments. Specifically, we may add to our team up to 6 new employees with anticipated wages of \$225,000 per year
- We also expect to maintain, or more likely, increase our operational spending with local agricultural suppliers and service providers, given our projected increased investments in operations on the land remaining in agricultural and ranching use and in the new agricultural-related business.
- Net revenues per acre from land that will be used for wind or solar development by the project will substantially exceed revenues from the present dry land wheat farming.¹⁵⁴

In addition, an adjacent non-participating owner, Mr. James Kirkham, provided a letter dated January 14, 2022, stating that the proposed project would not hinder his ability to farm, or increase the cost of farming on their property.¹⁵⁵

The relatively low percentage of overall land owned by the Cunningham Sheep Company that would be converted from cultivation to energy infrastructure, combined with the substantial evidence provided in the form of signed letters from both participating and non-participating landowners indicating that the facility and removal of agriculturally productive lands would not significantly impact agricultural operations and that the lease payments would be more than current revenue streams and be used to support new agricultural-related jobs and agricultural operations to a level exceeding current practices represent that the proposed solar micro-siting area would have a minimal impact to agriculture. Based on these facts, evidence and reasons, the Council finds that using 1,896 acres of EFU-zoned land used for dryland winter wheat in Umatilla County would represent a minimal impact to agriculture.

Minimal Impact on Surrounding Lands

As evaluated under the conditional use requirements of UCDC 152.061, the Council finds that the proposed solar facility would have minimal impacts to accepted farm practices, and the cost thereof, on surrounding agricultural lands. The applicant's facts and evidence for this argument are not distinct and do not expand upon the evaluation under the conditional use requirements. Because the proposed solar facility must demonstrate that the proposed use has minimal impacts on surrounding lands used for agricultural purposes and the evaluation

¹⁵⁴ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 153-158 of 158.

¹⁵⁵ Id.

presented for the “reasons” exception offered the same information, the Council finds that this information does not support a basis that impacts of using 1,896 acres on EFU-zoned land used for dryland winter wheat in Umatilla County would represent a minimal impact to agriculture.

Lack of Water Availability

There are no active or historic water rights within, or adjacent to, the proposed solar micrositing area. Therefore, use of the lands within the solar micrositing area for energy infrastructure would not impact potential future use as irrigated agriculture. Applicant suggests that if the lands were irrigated or had a water right, that the impacts would be greater than what are realized under non-irrigated lands. Because the lands within the solar micrositing area are actively used for cultivation of dryland winter wheat, the Council finds that whether the site has a water right or not is irrelevant and does not support the evaluation of whether the proposed solar facility would result in minimal impacts to agriculture.

Minimal Impacts to Agriculture Justifies a Goal 3 Exception

Based on the reasoning and analysis presented above, the Council finds that “minimal impacts to agriculture” is a reason that, in part, would justify taking an exception to Goal 3. Specifically, this reason is determined as justified because the solar micrositing area represents less than 1% of agricultural and cultivated dryland winter wheat within Umatilla County and less than 2% of the underlying landowner, Cunningham Sheep Company’s, total lands in Umatilla County; and the agricultural loss in acreage would be offset by revenue from lease payments redirected back into intensified agricultural operations within Umatilla County.

Local Economic Benefits

The applicant asserts that the proposed solar facility would result in local economic benefits as follows:

- Lease payments to participating landowners would provide a net benefit in revenue and investment in agriculture and local ventures compared to the value of dryland wheat cultivation, which fluctuates (\$8.04 per bushel in 2012 to \$4.44 per bushel in 2016)¹⁵⁶ in a manner where the land may otherwise, at times, be operated at a loss. This is supported by letters provided by the participating landowners (ASC Exhibit K Attachment K-1).
- Facility construction would result in up to 150 local jobs and approximately 345 secondary jobs. No evidence is provided to support this representation; Council refrains from imposing the representation as a condition in the event of local work force limitations at the time of construction.

¹⁵⁶ Oregon Department of Agriculture 2021. Oregon Agricultural Statistics & Directory, p.15. Available: <https://www.oregon.gov/oda/shared/Documents/Publications/Administration/AgStatsDirectory.pdf>

- Property tax payments to Umatilla County (\$49.9 million over 25-year period) or deferred property tax payment under a Strategic Investment Program (up to \$39 million over 25-year period, which includes a \$7,000/MW fee and onetime \$2.5 million community investment fee) or Fee In Lieu of property taxes for solar projects (\$45.5 million over 25-year period). Applicant anticipates entering into a SIP agreement with Umatilla County, but has not yet executed such agreement. Property taxes for the proposed solar micrositing area without the project are represented as \$0.35 million for a 25-year period.

For information purposes only, the Council relies on a decision by the Oregon Land Use Board of Appeals (LUBA) that concluded that a general desire to diversify or boost the local economy is an insufficient basis to justify an exception to a resource goal.¹⁵⁷ Therefore, the Council finds that the underlying intent of Goal 3, preservation of agricultural lands in large blocks for working farm operations, apply to the evaluation of whether the reason “local economic benefit” justifies taking a goal exception. To meet this intent, the Council finds that the applicant be required to demonstrate that, through its SIP negotiations with Umatilla County, the fee payment amount and programs *considered* for funding through the community investment fee benefit and preserve agricultural practices [Emphasis added]. The Council acknowledges that the County is in the best position to direct SIP investments and may not have programs that are designed to benefit agricultural practices. The Council imposes the following condition:

Land Use Condition 15 (PRE): Prior to construction of the solar facility, the certificate holder shall provide evidence to the Department that it has executed a Strategic Investment Program (SIP) agreement with Umatilla County. In the SIP agreement or other documentation, the certificate holder shall demonstrate that negotiations with the county evaluated an investment fee amount and program, if available, that would benefit or preserve agriculture. If a SIP agreement is not executed with the county, certificate holder shall provide evidence to the Department of the alternative property tax payment option selected and shall identify any programs implemented by the county that would receive tax revenue with an agricultural benefit.
[PRE-LU-11]

Based on the evidence provided in the letter from Cunningham Sheep Company, as provided in ASC Exhibit K Attachment K-1, affirming that lease payments would be used to intensify agricultural activities within the remaining operating agricultural lands; and, the benefit to the local economy from property taxes, based on compliance with the above-referenced condition, the Council finds that “local economic benefit” is a reason that justifies taking an exception to the statewide policy embodied in Goal 3.

¹⁵⁷ *Oregon Shores Conservation Coalition v. Coos County* (2021) WL 2336704, *VinCEP v. Yamhill County*, 55 Or LUBA 433 (2007), *Morgan v. Douglas County*, 42 Or LUBA 46 (2002), and *Middleton v. Josephine County*, 31 Or LUBA 423 (1996)

1 *Local Economic Benefits Justify a Goal 3 Exception*

2
3 Based on the reasoning and analysis presented above, the Council finds that “local economic
4 benefit” is a reason that, in part, would justify taking an exception to Goal 3. Specifically, that
5 the underlying landowner would receive sufficient lease payments to reinvest and intensify
6 agricultural practices compared to present state and that Umatilla County would receive
7 property tax payments in excess of \$39 million compared to present state, supported by a
8 condition.

9
10 *Locational Dependency*

11
12 The applicant asserts that the proposed solar facility site is locationally dependent because: it is
13 located in proximity to an existing transportation network; within 1-mile of an existing BPA grid
14 interconnection point located within the proposed site boundary; there are no other
15 alternatives within the subject tracts that would provide the same footprint with a lesser
16 impact to cultivated land; it would not impact irrigated agriculture; and it provides a site that
17 allows for integration of a wind facility.

18
19 Based on the analysis presented below, the Council finds the land on which the solar site would
20 be located, is particularly suited for development of a solar facility given its proximity to the
21 proposed wind facility components and infrastructure because the solar facility would be able
22 to: utilize an existing road during construction and operation of both wind and solar facility
23 components; share energy infrastructure with wind facility components; and avoid any impacts
24 to irrigated agriculture.

25
26 The overall site allows for siting of up to 112 wind turbines, use of up to 1,800 acres for solar PV
27 electric generating equipment and sharing of a collector substation. The solar site would be
28 located directly off of Speare Canyon Road/Coombs Canyon Road, an existing road in good
29 condition that would be used to support both wind and solar construction and operation, thus
30 minimizing the extent of new road construction. Speare Canyon Road/Coombs Canyon Road
31 (County Road 1350) connects to US-395, as presented in ASC Exhibit U Figure U-1
32 Transportation Routes. This road is identified as a primary transportation route for facility
33 construction and would minimize excessive vehicle miles travelled and associated air quality
34 emissions if the site were not served by an existing road. Proximity to an existing transportation
35 system minimizes new road construction and traffic-related impacts from development of both
36 wind and solar energy generation components.

37
38 Wind and solar energy infrastructure would also be sited in a manner that would allow sharing
39 of a northern project substation within the footprint of the solar site, minimizing impacts of
40 isolated energy infrastructure cited throughout the footprint of the 40,000 acre site boundary.

41
42 There are several proposed turbine strings in close proximity to the solar site. The number of
43 turbine locations within the closest turbines strings is 16 or approximately 50 MWs (16 wind
44 turbines x 3.03 MW = 48 MW). Therefore, to ensure that the justification for supporting this

1 “reason” is realized in final facility development, the Council adopts the following condition,
2 requiring the construction and operation of a minimum of 50 MWs of wind energy generation
3 components and use of shared infrastructure (existing roads, substation) in proximity to the
4 solar site.

5
6 **Land Use Condition 16 (PRE):** Prior to construction of solar photovoltaic energy generation
7 components, the certificate holder shall document that turbine strings with a minimum of
8 50 MW generation capacity be constructed in close proximity to the proposed solar site and
9 that the wind and solar facility components will share the northern project substation and
10 any existing roads during construction and operation. Documentation of the combination of
11 wind and solar energy generation components, at final design, shall be submitted to the
12 Department or Council for review and approval, per (a) or (b) as applicable:

- 13 a. If construction of wind energy generation components will commence within the same
14 12-month period as solar energy generation components, certificate holder shall submit
15 to the Department final facility design documents and executed contracts (e.g.,
16 construction contract, Power Purchase Agreement) or other evidence that shows a
17 minimum of 50 MW within turbine strings in close proximity to the solar site will be
18 constructed and that the wind and solar facility components will share the northern
19 project substation and any existing roads during construction and operation; or
20 b. If commencement of wind energy generation components will occur more than 12-
21 months after solar energy generation components, certificate holder shall submit to
22 Council, for review at a regularly scheduled Council meeting, facility design documents
23 and executed contracts (e.g., construction contract, Power Purchase Agreement) or
24 other evidence that demonstrates to Council’s satisfaction that turbine string with a
25 minimum of 50 MW generation capacity will be constructed in close proximity to the
26 solar site and that the wind and solar facility components will share the northern project
27 substation and any existing roads during construction and operation prior to the
28 construction completion deadline.

29 [PRE-LU-12]

30
31 *Locational Dependency Justifies a Goal 3 Exception*

32
33 Based on the above reasoning, analysis and compliance with the condition, the Council finds
34 that the applicant’s reason of “locational dependency” is a reason that would justify taking an
35 exception to the statewide policy embodied in Goal 3.

36
37 *Minimal Impacts to Other Environmental Resources*

38
39 The applicant asserts that the proposed solar facility would have minimal impacts to other
40 environmental resources because it avoids: Washington ground squirrel habitat, waters of the
41 state per ORS 196.800, FEMA 100-year floodplains, USFWS-designated critical habitat, and
42 ODFW-designated big game winter ranges.

Evidence to support these facts are included in ASC Exhibit P, Attachment P-2 2017-2019 Wildlife and Habitat Categorization Survey Report Figures 1 and 2. These figures demonstrate that habitat within the solar micrositing area is Category 6 and therefore does not include WGS habitat, although there is suitable habitat within 1,000 feet of the edges of the solar micrositing area that could result in Category 1 or 2 habitat within the solar micrositing area, based on preconstruction surveys. ASC Exhibit J Attachment J-3 provides the applicant's analysis of potential impacts from construction and operation of proposed solar facility components on regulated Waters of the State (WOS) as defined under ORS 196.800(15). Based on the applicant's wetland delineation surveys, there are no WOS under ORS 196.800(15) identified with the solar micrositing area, which was reviewed and concurred with by DSL.¹⁵⁸ Ephemeral streams are protected as WOS under the Clean Water Act (CWA) and are protected resources under the Council's Soil Protection standard, as ephemeral streams act as drainages, that if impacted, could contribute to erosion impacts to surrounding agricultural practices.

Minimal Environmental Impacts Justify a Goal 3 Exception

The use of the proposed solar facility site would result in minimal overall environmental impacts. Construction-related impacts to public services from traffic, dust, housing, hospitals, water and fire; and operational impacts such as increased noxious weed infestations and public-service related fire impacts would be minimized through compliance with site certificate conditions. The Council finds that the applicant's reason of "minimal environmental impacts" is a reason that would justify taking an exception to the statewide policy embodied in Goal 3.

Summary of Reasons Determined as Justifiable

The Council finds that 1) minimal impacts to agriculture, 2) local economic benefits; 3) locational dependency; and 4) minimal environmental impacts are four reasons that justify granting the facility an exception to the statewide policy embodied in Goal 3.

Environmental, Economic, Social and Energy Consequences

Under OAR 345-022-0030(4)(c)(B) and ORS 469.504(2)(c)(B), in order for the Council to determine whether to grant an exception to a statewide planning goal, the applicant must show that "the significant environmental, economic, social and energy consequences" of the proposed solar facility have been identified and mitigated in accordance with Council standards.

Environmental Consequences

The proposed solar facility must satisfy the requirements of all applicable EFSC standards, rules and statutes. Applicable environmental EFSC standards include: General Standard of Review; Soil Protection standard; Protected Areas standard; Recreation Standard; Scenic Resources

¹⁵⁸ NHWAPPDoc2-9b ASC Exhibit J. DSL Concurrence Solar Components 2021-04-07. (WD #2020-0613)

standard; Fish and Wildlife Habitat standard; and the Threatened and Endangered Species standard, as evaluated in this order. Based on the findings of fact, conclusions of law, and conditions of approval presented in this order related to environmental EFSC standards, the Council finds that the proposed solar facility, including mitigation, would not cause significant adverse environmental consequences or impacts.

Economic Consequences

The proposed solar facility would create jobs during construction and operation; it would result in lease payments to participating landowners¹⁵⁹, providing a more stable source of income compared to dryland winter wheat or CRP payments; and would result in property taxes to Umatilla County. The proposed solar facility is not anticipated to create negative economic impacts to public services, based on letters from water service and fire protection service providers in ASC Exhibit U.

Based on these facts, the Council finds that the solar facility, including mitigation, would have a beneficial economic impact.

Social Consequences

Social consequences are evaluated within the context of impacts on a community from a facility, such as impacts from facility visibility, noise, traffic, or demand on providers of public services. As presented in this order, the proposed solar facility components would not be expected to result in significant adverse visual or noise impacts on any scenic resource, protected areas, or important recreational opportunity within the analysis areas, or to public services.

As discussed in Section IV.K., *Historic, Cultural and Archaeological Resources*, the Council imposes conditions to ensure that avoidance and management measures are implemented during construction and operation to protect cultural or archaeological resources identified as eligible or potentially eligible for NRHP listing. As described further in Section IV.K. of this order, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the applicant have reached a mutual agreement on the effects the facility may have on historic properties of religious and cultural significance to the CTUIR.

Based on the findings of fact and conclusions of law, and conditions of compliance as presented in this order under the Council's Scenic Resources standard; Historic, Cultural and Archeological standard; Public Services standard; and Recreation standard, the Council finds that the solar facility would not cause significant adverse social consequences.

Energy Consequences

¹⁵⁹ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 153-158 of 158, Attachment K-1. Landowner Letters

1
2 The proposed solar facility would produce up to 260 MW of renewable, emissions-free energy.
3 Therefore, the Council concludes that the proposed solar facility would not cause significant
4 adverse energy consequences and would provide a positive energy consequence by producing
5 clean, renewable electricity.
6

7 Compatibility with Adjacent Land Use 8

9 Under OAR 345-022-0030(4)(c)(C) (and ORS 469.504(2)(c)(C)), in order for the Council to
10 determine whether to grant an exception to a statewide planning goal, the applicant must
11 show that the proposed solar facility is compatible with other adjacent land uses or will be
12 made compatible through mitigation measures.
13

14 The solar micrositing area is surrounded by EFU-zoned land. Adjacent land uses include
15 livestock grazing and dryland wheat cultivation (see ASC Exhibit K Figure K-10). To support
16 compatibility of the proposed energy infrastructure within lands zoned for agricultural use,
17 numerous measures would be required including:
18

- 19 • Consultation with area landowners during construction and operation to identify site
20 specific concerns and measures to minimize adverse impacts to agricultural practices
21 (see Land Use Conditions 2 and 3)
- 22 • Recordation of a “Covenant Not to Sue” with Umatilla County (see Land Use Condition
23 18)
- 24 • Implementation of a Revegetation and Noxious Weed Control Plan during construction
25 and operation (see Fish and Wildlife Habitat Conditions 2 and 3)
- 26 • Adherence to the requirements of a 1200-C NPDES permit; and, additional dust control
27 management measures during construction (see Soil Protection Conditions 1 and 2)
- 28 • Implementation of erosion control and site stabilization measures during operations
29 (see Soil Protection Condition 4, 5 and 7)
- 30 • Implementation of a Traffic Management Plan and execution of a Road Use Agreement
31 with Umatilla County to minimize potential construction-related traffic impacts on local
32 roads (see Public Services Condition 1)
33

34 Based upon the zone and type of adjacent land uses, and compliance with the above-
35 referenced conditions, the Council finds that the solar facility would be compatible with
36 adjacent land uses.
37

38 The Council finds an exception to Goal 3 is justified under OAR 345-022-0030(4)(c) and ORS
39 469.504(2)(c).
40

41 IV.E.2. Directly Applicable State Laws and Statutes 42

43 Land use rules and statutes that will apply to the facility include LCDC OAR 660-033-0130(37)
44 and (38); ORS 215.274 and ORS 215.275.

1
2 **IV.E.2.a LCDC Minimum Conditional Use Requirements for Wind Facility at OAR 660-033-**
3 **0130(37)**
4

5 As relevant to the proposed wind facility, OAR 660-033-0130(37) provides that:

6
7 ** * * A proposal for a wind power generation facility shall be subject to the following*
8 *provisions:*
9

10 *(a) For high-value farmland soils described at ORS 195.300(10), the governing body or its*
11 *designate must find that all of the following are satisfied:*
12

13 The wind micrositing area is interspersed with high value farmland soils per ORS 195.300(10), as
14 presented in ASC Exhibit K Figure K-6; therefore, compliance with OAR 660-033-0130(37)(a) is
15 required.
16

17 *(A) Reasonable alternative have been considered to show that siting the wind power*
18 *generation facility or component thereof on high-value farmland soils is necessary*
19 *for the facility or component to function properly or if a road system or turbine string*
20 *must be placed on such soils to achieve a reasonably direct route considering the*
21 *following factors:*

22 *(i) Technical and engineering feasibility;*

23 *(ii) Availability of existing rights of way; and*

24 *(iii) The long term environmental economic, social and energy consequences of siting*
25 *the facility of component on alternative sites, as determined under paragraph*
26 *(B);*
27

28 OAR 660-033-0130(37)(a)(A) requires the applicant to consider “reasonable alternatives” to
29 locating the facility, or components of the facility, on high-value farmland. The applicant must
30 “show that siting the wind power generation facility or component thereof on high-value
31 farmland soils is necessary for the facility or component to function properly.” In the case of
32 access roads and turbine strings, the applicant must show that these components must be
33 placed on high-value farmland soils “to achieve a reasonably direct route.” To demonstrate the
34 necessity of using high-value farmland for the facility to “function properly” or for a road or
35 turbine string to “achieve a reasonably direct route,” the applicant must consider technical and
36 engineering feasibility and the availability of existing rights-of-way. The applicant must also
37 consider the long term environmental, economic, social and energy consequences of siting the
38 facility or component on alternative sites, as determined under OAR 660-033-0130(37)(a)(B),
39 discussed below.
40

41 *(i) Technical and Engineering Feasibility*
42

43 The wind micrositing area includes high-value farmland under ORS 195.300(10)(f)(C), which
44 includes lands within EFU-zoned land that are no more than 3,000 feet above mean sea level,

1 with an aspect between 67.5 and 292.5 degrees and a slope between zero and 15 percent, and
2 that is located in the portion of the Columbia Valley viticultural area. The nature of lands
3 meeting this specific criterion is patchy and interspersed, resulting in significant limitations in
4 designing wind facility components to avoid patches. The extent of high value farmland soils
5 within the wind micrositing area are presented in ASC Exhibit K Figure K-6.1 and K-6.2.
6

7 The applicant affirms that turbine strings and associated roads have been designed in a manner
8 that maximizes renewable energy generation, where the site provides favorable wind
9 conditions and areas of high elevation. As demonstrated in ASC Exhibit K Figure K-6.1 and K-6.2,
10 it would not be possible to avoid or substantially reduce impacts on high value farmland soils
11 without compromising the technical feasibility of the wind facility components. Siting wind
12 facility components to avoid high value farmland soils is not feasible due to what the applicant
13 describes as the 'patchy' nature of the high value farmland soil, the unusual routes high value
14 farmland soil avoidance would require, and the impacts to existing farmland that the
15 realignment would require. Therefore, the Council finds that the wind facility micrositing area
16 must be sited on high value farmland soils due to technological and engineering feasibility
17 limitations to avoidance.
18

19 *(ii) Availability of Existing Rights-of-Way*
20

21 This factor applies primarily to access roads and transmission lines associated with a wind
22 power facility, which can sometimes take advantage of existing utility and road rights-of-way to
23 reduce overall project impacts to farmland. The location of access roads is generally dictated by
24 the location of the wind turbines. The applicant asserts that there are few if any rights-of-way
25 within the wind micrositing area or surrounding analysis area. Rights-of-way within the analysis
26 area are also interspersed with high value farmland pursuant to ORS 195.300(10)(f)(C).
27 Therefore, the Council finds that the wind facility micrositing area must be sited on high value
28 farmland soils due to a lack of existing rights-of-way that would avoid high value farmland soils.
29

30 *(iii) Long-Term Environmental, Economic, Social, and Energy Consequences*

31 *(B) The long-term environmental, economic, social and energy consequences*
32 *resulting from the wind power generation facility or any components thereof at*
33 *the proposed site with measures designed to reduce adverse impacts are not*
34 *significantly more adverse than would typically result from the same proposal*
35 *being located on other agricultural lands that do not include high-value farmland*
36 *soils;*
37

38 Environmental consequences of siting the wind facility micrositing area on high value farmland
39 soils pursuant to ORS 195.300(10)(f)(C) would not be significantly more adverse than siting on
40 other agricultural lands for several reasons. First, the soils are designated as high value
41 farmland soils for its potential value to viticulture. However, the wind micrositing area has
42 never been used for viticulture; therefore, direct impacts to viticulture would not occur.
43 Second, given the extent of high value soils pursuant to ORS 195.300(10)(f)(C), wind facility
44 components could not be sited in any other location within the analysis area without a

comparable impact, in terms of acres, to high value farmland soils. Lastly, total permanent and temporary impacts to high value soils from wind facility components is insignificant given the remaining available acres for cultivation within the subject tracts.

Economic, social and energy consequences include temporary construction-related jobs, revenue for landowners and the community from property taxes and road improvement requirements. Construction and operation of the facility will have minimal social impacts based on the evaluation of impacts to fire, police, housing, traffic and emergency services public and private service providers provided in Section IV.M. *Public Services* of this order.

Energy benefits include approximately 340 MWs of renewable energy generation, if all wind turbines are constructed.

Given the specific benefits of the wind micrositing area from topography and high wind areas, and the limitations in siting facility components anywhere in proximity that would avoid high value farmland while still being sited in a sensical manner (and not unnecessarily spread out and interspersed to avoid high value farmland), the Council finds that siting of the wind facility components on high value farmland would have limited long-term environmental impacts and beneficial economic, social and economic consequences.

(C) Costs associated with any of the factors listed in paragraph (A) may be considered, but costs alone may not be the only consideration in determining that siting any component of a wind power generation facility on high-value farmland soils is necessary;

Cost was not a determinative factor in siting the wind facility micrositing corridor.

(D) The owner of a wind power generation facility approved under subsection (a) shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this subsection shall prevent the owner of the facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration; and

The applicant will be responsible for all areas temporarily disturbed during construction, maintenance or repair of the proposed wind facility, including the components that would be located on EFU-zoned land. As evaluated in Section IV.H. *Fish and Wildlife Habitat* and IV.G. *Retirement and Financial Assurance* of this order, Fish and Wildlife Habitat Condition 1 will require that temporarily disturbed vegetation is restored to its pre-disturbance condition; and Retirement and Financial Assurance Condition 4 will ensure that, prior to construction, the applicant obtain and submit to the Department a bond or letter of credit based on an amount be considered by Council as satisfactory for facility decommissioning. The bond or letter of credit will remain in effect until the facility is decommissioned to provide assurance to the

1 State, in the event the applicant is unable to fulfil its decommissioning obligations. Then, upon
2 facility decommissioning, the applicant will be required to decommission the facility in
3 accordance with a Council approved decommissioning plan.

4
5 In addition, the Council imposes a condition requiring that all applicant representations that
6 would minimize and mitigate temporary and permanent impacts to agricultural lands be
7 incorporated into an Agricultural Mitigation Plan and required to be implemented under Land
8 Use Conditions 2 and 3.

9
10 *(E) The criteria of subsection (b) are satisfied.*

11
12 *(b) For arable lands, meaning lands that are cultivated or suitable for cultivation, including*
13 *high-value farmland soils described at ORS 195.300 (Definitions for ORS 195.300 to*
14 *195.336)(10), the governing body or its designate must find that:*

15 *(A) The proposed wind power facility will not create unnecessary negative impacts on*
16 *agricultural operations conducted on the subject property. Negative impacts could*
17 *include, but are not limited to, the unnecessary construction of roads, dividing a field*
18 *or multiple fields in such a way that creates small or isolated pieces of property that*
19 *are more difficult to farm, and placing wind farm components such as*
20 *meteorological towers on lands in a manner that could disrupt common and*
21 *accepted farming practices;*

22
23 The applicant provided numerous commitments to ensure that the design and construction of
24 the wind facility will not create unnecessary negative impacts on agricultural operations.
25 Commitments include landowner consultation on design and construction methods;
26 implementation of a long-term noxious weed control plan; recordation of a Covenant Not to
27 Sue; and erosion and compaction minimization measures. All of the applicant's representations
28 are represented as site certificate conditions that are imposed by Council.

- 29
30
 - Soil Protection Conditions 1 and 2 would require consultation with the Umatilla County
31 Soil and Water Conservation District, prior to construction, and would require
32 implementation of best management practices to minimize and monitor for offsite
33 erosion impacts.
 - Soil Protection Condition 3 would require that, during operations, the applicant
34 implement a Soil Monitoring Plan that would evaluate and mitigate for topsoil loss and
35 erosion impacts resulting from construction.
 - Soil Protection Conditions 4, 5 and 7 would require that the applicant adhere to the
36 requirements of an SPCC during construction and operation, to minimize any potential
37 impacts from soil contamination.
 - Fish and Wildlife Conditions 1,2 and 3 would require that the applicant implement and
38 adhere to the requirements of a Revegetation and Noxious Weed Plan, prior to and
39 during construction and operation, including long-term revegetation and noxious weed
40 control.

41
42
43

- Public Services Condition 1 would require implementation of a Traffic Management Plan and execution of a Road Use Agreement with Umatilla County Public Works Department, which would minimize potential traffic and dust-related impacts.
- Land Use Conditions 2 and 3 would require implementation of an Agricultural Mitigation Plan that would require that the applicant demonstrate completion of landowner consultation on facility design and construction methods, and that the applicant follow-through with any commitments on siting facility components to minimize agricultural impacts and provide adequate compensation for loss of agriculturally productive lands.
- Land Use Condition 12 would require that the applicant record a “Covenant Not to Sue” with Umatilla County.

The Council finds that the potential impacts to agricultural operations would be minimized through compliance with the conditions consistent with OAR 660-033-0130(37)(b)(A).

(B) The presence of a proposed wind power facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied and how topsoil will be stripped, stockpiled and clearly marked. The approved plan shall be attached to the decision as a condition of approval;

This provision is consistent with Council’s Soil Protection standard, where the Council imposes a condition requiring that, during facility construction, the applicant be required to adhere to the requirements of a DEQ-approved Erosion and Sediment Control Plan during construction (see Soil Protection Conditions 1 and 2) and implementation of a Revegetation and Noxious Weed Plan, prior to and during construction and operation (see Fish and Wildlife Conditions 1, 2 and 3). This plan includes best management practices to be implemented during construction and operation designed to reduce and minimize unnecessary soil erosion or loss that could limit agricultural productivity within the facility site and on adjacent EFU zoned land.

Based upon compliance with the site certificate conditions, the Council finds that the proposed wind facility components will satisfy the requirements under OAR 660-033-0130(37)(b)(B).

(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval; and

1 This provision is consistent with Council's Soil Protection standard, where the Council imposed
2 a condition requiring that the applicant minimize compaction during construction, reclaim and
3 restore temporarily impacted soils including decompaction to a depth of 12 to 18", and
4 implement a monitoring and mitigation plan to address any long-term compaction related soil
5 impacts (see Soil Protection Conditions 1, 2, and 3). In addition, the Council required
6 implementation of a Revegetation and Noxious Weed Plan, prior to and during construction
7 and operation (see Fish and Wildlife Conditions 1, 2 and 3). This plan includes best management
8 practices (BMPs) to be implemented during construction and operation designed to reduce,
9 minimize and mitigate for unnecessary soil compaction that could limit agricultural productivity
10 within the solar facility site and on adjacent EFU zoned land.

11
12 Based upon compliance with the site certificate conditions, the Council finds that the wind
13 facility components would satisfy the requirements under OAR 660-033-0130(37)(b)(C).

14
15 *(D) Construction or maintenance activities will not result in the unabated introduction or*
16 *spread of noxious weeds and other undesirable weeds species. This provision may be*
17 *satisfied by the submittal and county approval of a weed control plan prepared by an*
18 *adequately qualified individual that includes a long-term maintenance agreement.*
19 *The approved plan shall be attached to the decision as a condition of approval.*
20

21 Noxious weed control is required to ensure the impacts to adjacent agricultural lands are
22 minimized and that revegetation and site stabilization within areas of disturbance are achieved.
23

24 Fish and Wildlife Habitat Conditions 1, 2 and 3 require that the applicant implement a
25 Revegetation and Noxious Weed Plan, which includes requirements for noxious weed control,
26 prior to and during construction and operation. Elements of the noxious weed control
27 requirements include preconstruction identification and treatment of infestation locations;
28 flagging, avoiding and monitoring of infestation areas during construction; and long-term
29 monitoring and treatment during operations. All of these requirements would be reported to
30 the Department and Umatilla County Weed Department and allow for the Department to
31 require additional treatment and monitoring given reported results. Based upon compliance
32 with the condition, the Council finds that the wind facility components would not result in
33 unabated introduction or spread of noxious weeds and other undesirable weed species and
34 would satisfy the requirements under OAR 660-033-0130(37)(b)(D).

35
36 *(c) For nonarable lands, meaning lands that are not suitable for cultivation, the governing*
37 *body or its designate must find that the requirements of OAR 660-033-0130 (Minimum*
38 *Standards Applicable to the Schedule of Permitted and Conditional Uses)(37)(b)(D) are*
39 *satisfied.*
40

41 The applicant will be required to implement noxious weed control under the Revegetation and
42 Noxious Weed Plan, per Fish and Wildlife Habitat Conditions 1, 2, and 3, consistent with OAR
43 660-033-0130(37)(b)(D), as required for impacts to nonarable lands.
44

IV.E.2.b LCDC Minimum Conditional Use Requirements for Solar Facility at OAR 660-033-0130(38)

The solar facility site is located within land classified as high-value farmland per ORS 195.300(10)(a), (c) and (f). As shown in Table 4: *High-Value, Arable and Nonarable Lands in and Around the Site Boundary and Micrositing Corridors*, the solar facility components would use, occupy, or cover 242 acres of high-value farmland. The solar site would not be located on any high value farmland soils as defined under OAR 660-033-0020(8)(b)-(e).

Table 4: High-Value, Arable and Nonarable Lands in and Around the Site Boundary and Micrositing Corridors

Land Type	Acres/Percent in Analysis Area	Acres/Percent in Site Boundary	Acres/Percent in Micrositing Corridors	Acres/Percent in Solar Siting Area
High-value farmland	28,420/36%	11,634/24%	4,553/29%	242 (13%)
Arable	64,155/81%	37,761/78%	13,939/88%	1,840 (97%)
Nonarable	14,893/19%	10,412/22%	1,786/11%	56 (3%)
Source: NHWAPDoc2-10 ASC Exhibit L Land Use 2022-01-31. Table K-1				
¹ High-value farmland designations per ORS 195.300(10)(a), (c), and (f).				
² Arable includes Class I-IV soils, cultivated land regardless of soil class, and high-value lands and soils.				

OAR 660-033-0130 – Minimum Standards Applicable to the Schedule of Permitted and Conditional Uses

(38) A proposal to site a photovoltaic solar power generation facility shall be subject to the following definitions and provisions:

****160*

(g) For high-value farmland described at ORS 195.300(10), a photovoltaic solar power generation facility shall not use, occupy, or cover more than 12 acres unless:

(B) The provisions of paragraph (h)(H) are satisfied; or

(C) A county adopts, and an applicant satisfies, land use provisions authorizing projects subject to a dual-use development plan. Land use provisions adopted by a county pursuant to this paragraph may not allow a project in excess of 20 acres. Land use provisions adopted by the county must require sufficient assurances that the farm use element of the dual-use development plan is established and maintained so long as the photovoltaic solar power generation facility is operational or

¹⁶⁰ OAR 660-033-0130(38)(a)-(e) contain definitions. The provisions begin at (g).

1 *components of the facility remain on site. The provisions of this*
2 *subsection are repealed on January 1, 2022.*
3

4 OAR 660-033-0130(38)(g) restricts a photovoltaic solar power generation facility from using,
5 occupying, or covering more than 12 acres of high value farmland unless the provisions of OAR
6 660-033-0130(38)(h)(H) are satisfied or the County adopts (and the applicant satisfies) land use
7 provisions authorizing projects subject to a dual-use development plan.¹⁶¹ The applicant
8 acknowledges,¹⁶² and the Council agrees, that the solar facility components would not meet
9 either one of these exemptions. As provided under OAR 660-033-0130(38)(k), a solar PV facility
10 that exceeds the threshold established by OAR 660-033-0130(38)(g) requires a goal exception.
11

12 Because the solar facility components would use, occupy, or cover more than 12 acres of high
13 value farmland, and does not meet either exemption specified under OAR 660-033-0130(38)(g),
14 the applicant requests an exception to Statewide Planning Goal 3. The Council's analysis of the
15 exception request is provided in Section IV.E.1.b. *Goal 3 Exception* of this order. The remainder
16 of the OAR 660-033-0130(38) criteria are evaluated here.
17

18 *(h) The following criteria must be satisfied in order to approve a photovoltaic solar power*
19 *generation facility on high value farmland described at ORS 195.300(10):*
20

21 OAR 660-033-0130(38)(h)(A) – (D) requires a demonstration that the proposed solar facility
22 components would not create unnecessary negative impacts to agricultural operations, soil
23 erosion or loss, soil compaction, or the unabated introduction or spread of noxious weeds.
24

25 *(A) The proposed photovoltaic solar power generation facility will not create*
26 *unnecessary negative impacts on agricultural operations conducted on any*
27 *portion of the subject property not occupied by project components. Negative*
28 *impacts could include, but are not limited to, the unnecessary construction of*
29 *roads dividing a field or multiple fields in such a way that creates small or*
30 *isolated pieces of property that are more difficult to farm, and placing*
31 *photovoltaic solar power generation facility project components on lands in a*
32 *manner that could disrupt common and accepted farming practices;*
33

34 OAR 660-033-0130(38)(h)(A) requires a demonstration that the proposed solar facility would
35 not create unnecessary negative impacts to agricultural operations, such as dividing a field or
36 multiple fields or placing facility components on lands in a manner that could disrupt accepted
37 farming practices.
38

39 ASC Exhibit K Figure K-10 demonstrates that the solar facility components will be located
40 entirely on currently cultivated lands owned by Pendleton Ranches Inc; Cunningham Sheep Co;

¹⁶¹ Land use provisions adopted by a county pursuant to this paragraph may not allow a project in excess of 20 acres. OAR 660-033-0130(38)(g)(B).

¹⁶² NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Pages 65-76 of 158.

1 Mud Springs Ranches; Buttke Ranch LLC; Buttle Ranch Partnership; and Hoke Ranches, where
2 the solar microsite area is surrounded by uncultivated areas.

3
4 Steven H. Corey of Cunningham Sheep Company affirmed that the solar facility would result in
5 valuable lease payments that would allow his family to intensify agricultural practices on land
6 surrounding the project boundary. Mr. Corey provided numerous statements the Council
7 weighed and considered as substantially supportive evidence in the evaluation of this reason.
8 He stated:

- 9
- 10 • We are confident the project's location in this area will not negatively impact our
11 existing use of our land surrounding the solar project boundary or overall success of our
12 ranching and farming operations.
 - 13 • The project will enable us to support and improve our farming and ranching operations
14 in the surrounding areas by providing valuable lease payments we can invest in ongoing
15 activities on more active land elsewhere on our property.
 - 16 • We intend to devote lease revenues in part to improve housing for our sheep herders as
17 well as farm employees in the cattle and farming departments. The lease payments
18 projected exceed the potential revenues from the current dryland wheat production on
19 the project boundary today. With board approval we may also acquire, clean up and
20 refurbish a contiguous agriculture-related business to strengthen the diversity base of
21 our legacy team. The lease payments exceed the potential revenues from the current
22 dryland wheat production on the project boundary today.
 - 23 • The project will not result in any loss of employees from our operations. To the contrary,
24 we expect to add agricultural jobs to our payroll based on the lease payments.
25 Specifically, we may add to our team up to 6 new employees with anticipated wages of
26 \$225,000 per year.
 - 27 • We also expect to maintain, or more likely, increase our operational spending with local
28 agricultural suppliers and service providers, given our projected increased investments
29 in operations on the land remaining in agricultural and ranching use and in the new
30 agricultural-related business.
 - 31 • Net revenues per acre from land that will be used for wind or solar development by the
32 project will substantially exceed revenues from the present dry land wheat farming.¹⁶³
- 33

34 In addition, an adjacent non-participating owner, Mr. James Kirkham, provided a letter dated
35 January 14, 2022, stating that the project would not hinder his ability to farm, or increase the
36 cost of farming on their property.¹⁶⁴

37 The applicant affirms that there will not be roads or other solar facility components outside of
38 the perimeter fence line, minimizing unnecessary negative impacts.

39
40 The Council imposes the following condition to ensure that the final design of the facility
41 continues to minimize unnecessary impacts to agriculture:

¹⁶³ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Pages 153-158 of 158.

¹⁶⁴ Id.

Land Use Condition 17 (PRE): Prior to construction of solar facility components, the certificate holder shall submit to the Department final solar facility component layout maps. The layout shall demonstrate that the perimeter fenceline is placed at the edge of existing agricultural fields or along property lines and is designed to minimize impacts, based on landowner consultation, to any remaining agricultural activities adjacent to the perimeter fenceline. The layout maps shall also demonstrate that any other solar facility components outside of the perimeter fenceline have been designed in a manner that minimize unnecessary agricultural impacts (e.g., isolation of property or access impacts).

[PRE-LU-13]

Based on compliance with the above-referenced condition and confirmation from landowners, the Council finds that the solar facility will not create unnecessary negative impacts on agricultural operations conducted on any portion of the subject property not occupied by facility components and therefore will satisfy the requirements under OAR 660-033-0130(38)(h)(A).

(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied. The approved plan shall be attached to the decision as a condition of approval;

This provision is consistent with Council's Soil Protection standard, where the Council imposed a condition requiring that, during facility construction, the applicant be required to adhere to the requirements of a DEQ-approved Erosion and Sediment Control Plan during construction (see Soil Protection Conditions 1 and 2) and implementation of a Revegetation and Noxious Weed Plan, prior to and during construction and operation (see Fish and Wildlife Conditions 1, 2 and 3). This plan includes best management practices to be implemented during construction and operation designed to reduce and minimize unnecessary soil erosion or loss that could limit agricultural productivity within the facility site and on adjacent EFU zoned land.

Based upon compliance with the site certificate conditions, the Council finds that the solar facility components would satisfy the requirements under OAR 660-033-0130(38)(h)(B).

(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil

1 *decompaction or other appropriate practices. The approved plan shall be*
2 *attached to the decision as a condition of approval;*

3
4 This provision is consistent with Council's Soil Protection standard, where the Council imposed
5 a condition requiring that the applicant minimize compaction during construction, reclaim and
6 restore temporarily impacted soils including decompaction to a depth of 12 to 18", and
7 implement a monitoring and mitigation plan to address any long-term compaction related soil
8 impacts (see Soil Protection Condition 3). In addition, the Council requires implementation of a
9 Revegetation and Noxious Weed Control Plan, prior to and during construction and operation
10 (see Fish and Wildlife Conditions Condition 1, 2, and 3). This plan includes best management
11 practices to be implemented during construction and operation designed to reduce, minimize
12 and mitigate for unnecessary soil compaction that could limit agricultural productivity within
13 the solar facility site and on adjacent EFU zoned land.

14
15 Based upon compliance with the site certificate conditions, the Council finds that the solar
16 facility components would satisfy the requirements under OAR 660-033-0130(38)(h)(C).

17
18 *(D) Construction or maintenance activities will not result in the unabated*
19 *introduction or spread of noxious weeds and other undesirable weed species. This*
20 *provision may be satisfied by the submittal and county approval of a weed control*
21 *plan prepared by an adequately qualified individual that includes a long-term*
22 *maintenance agreement. The approved plan shall be attached to the decision as a*
23 *condition of approval;*

24
25 Noxious weed control is required to ensure the impacts to adjacent agricultural lands are
26 minimized and that revegetation and site stabilization within areas of disturbance are achieved.

27
28 Fish and Wildlife Habitat Conditions 1, 2 and 3 require that the applicant implement a
29 Revegetation and Noxious Weed Plan, which includes requirements for noxious weed control,
30 prior to and during construction and operation. Elements of the noxious weed control
31 requirements include preconstruction identification and treatment of infestation locations;
32 flagging, avoiding and monitoring of infestation areas during construction; and long-term
33 monitoring and treatment during operations. All of these requirements would be reported to
34 the Department and Umatilla County Weed Department and allow for the Department to
35 require additional treatment and monitoring given reported results. Based upon compliance
36 with the condition, the Council finds that the solar facility components would not result in
37 unabated introduction or spread of noxious weeds and other undesirable weed species and
38 would satisfy the requirements under OAR 660-033-0130(38)(h)(D).

39
40 *(E) Except for electrical cable collection systems connecting the photovoltaic solar*
41 *generation facility to a transmission line, the project is not located on those high-*
42 *value farmland soils listed in OAR 660-033-0020(8)(a);*
43

1 As defined in OAR 660-033-0020(8)(a), high value farmland means land in a tract composed
2 predominately of soils that are either irrigated and classified prime, unique, Class I or II soils; or,
3 not irrigated and classified prime, unique, Class I or Class II soils.

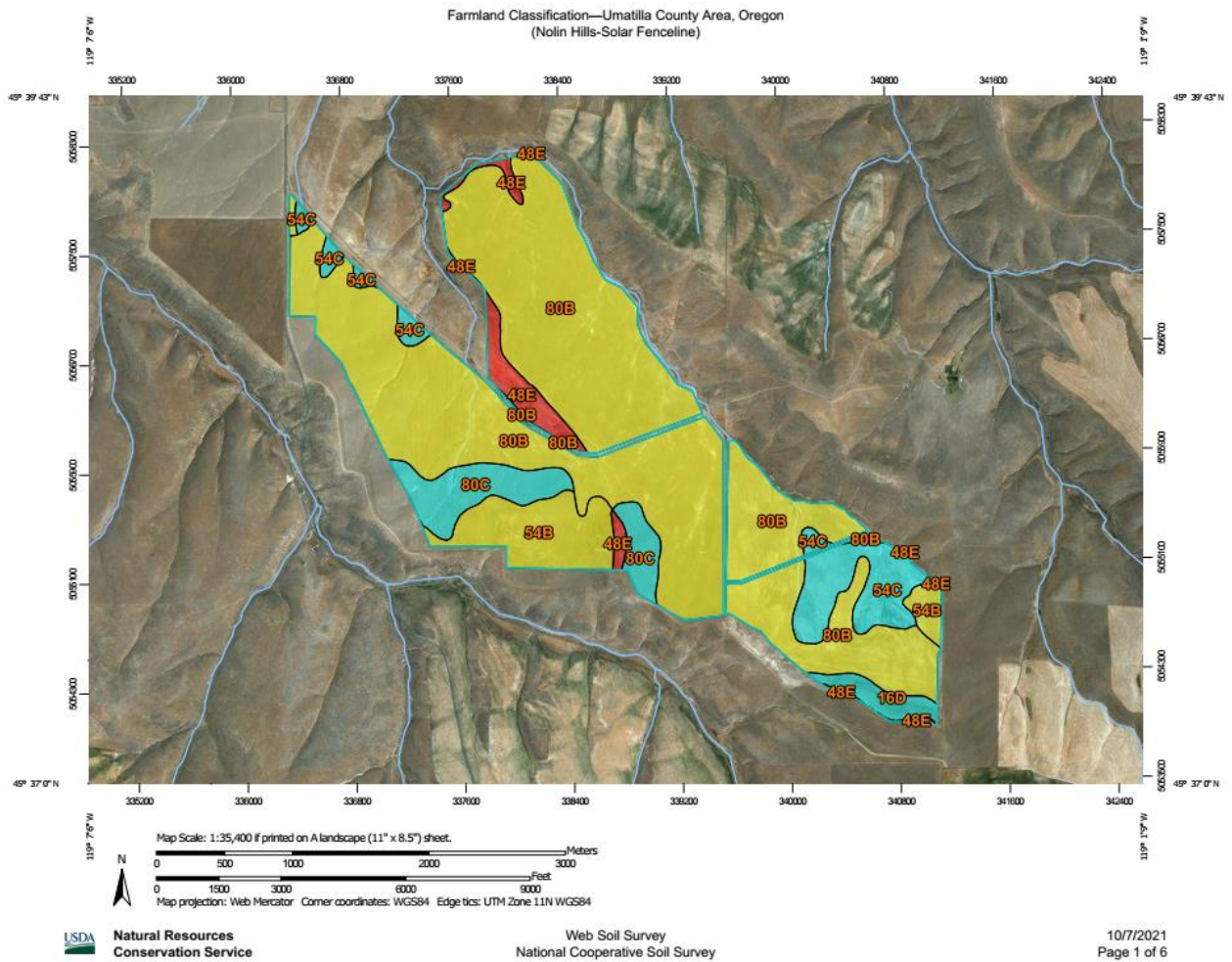
4
5 As shown in ASC Exhibit K, Figures K-4 and K-6.1, the proposed solar micrositng area is not
6 located on Class I or II soils and is not located within an irrigation district. The proposed solar
7 micrositng area is not irrigated and has no water rights.¹⁶⁵ As shown in Figure 5: *Farmland*
8 *Classification at the Proposed Solar Micrositng Area* below and Table 4: *Farmland Classification*
9 *at Proposed Solar Micrositng Area* below, the proposed solar micrositng area is comprised of
10 areas designated “not prime farmland” (shown in red in the figure), “prime farmland if
11 irrigated” (shown in yellow in the figure), and “farmland of statewide importance”(shown in
12 blue in the figure). Figure 5: *Farmland Classification at the Proposed Solar Micrositng Area*
13 below and Table 5: *Farmland Classification at Proposed Solar Micrositng Area* below, which are
14 based on Natural Resources Conservation Service (NRCS) data, also show that no unique
15 farmland is present within the proposed solar micrositng area. While the site contains “prime
16 farmland if irrigated,” because the subject tract is not irrigated and is not located within an
17 irrigation district, it is not considered irrigated farmland and is therefore not prime farmland.¹⁶⁶

18
19 Based upon the evidence in the record, the Council finds that, with the exception of electrical
20 cable collection systems connecting the solar PV facility to a transmission line, the solar
21 micrositng area would not be located on high-value farmland soils listed in OAR 660-033-
22 0020(8)(a), consistent with OAR 660-033-0130(38)(h)(E).

¹⁶⁵ NHWAPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Pages 84-101 of 158.

¹⁶⁶ NHWAPDoc40 pASC NRCS Farmland Classification at Solar Site and No Goal 5 Resources 2021-10-07.

1 **Figure 5: Farmland Classification at the Proposed Solar Micrositing Area**



2
3 Source: NHWAPPDoc40 pASC NRCS Farmland Classification at Solar Site and No Goal 5 Resources 2021-
4 10-07.

1

Table 5: Farmland Classification at Proposed Solar Micrositing Area

Map Unit Symbol	Map Unit Name	Rating	Acres in Area of Interest	Percent of Area of Interest	Color of Area shown in 5
16D	Cantala silt loam, 12 to 20 percent slopes	Farmland of statewide importance	34.5	1.8%	Blue
48E	Lickskillet very stony loam, 7 to 40 percent slopes	Not prime farmland	70.3	3.7%	Red
54B	Mikkalo silt loam, 2 to 7 percent slopes	Prime farmland if irrigated	155.0	8.2%	Yellow
54C	Mikkalo silt loam, 7 to 12 percent slopes	Farmland of statewide importance	144.1	7.6%	Blue
80B	Ritzville silt loam, 2 to 7 percent slopes	Prime farmland if irrigated	1,364.6	72.0%	Yellow
80C	Ritzville silt loam, 7 to 12 percent slopes	Farmland of statewide importance	127.6	6.7%	Blue
Source: NHWAPPDoc40 pASC NRCS Farmland Classification at Solar Site and No Goal 5 Resources 2021-10-07.					

2

(F) The project is not located on those high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:

- (i) Non high-value farmland soils are not available on the subject tract;
- (ii) Siting the project on non high-value farmland soils present on the subject tract would significantly reduce the project's ability to operate successfully; or
- (iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract than other possible sites also located on the subject tract, including those comprised of non high value farmland soils; and

12

The proposed solar micrositing area would not be located on high-value farmland soils listed in OAR 660-033-0020(8)(b)-(e), which include certain high-value farmland tracts¹⁶⁷ outside the Willamette Valley growing specified perennials, and certain soils located in other areas that are far from the site boundary (specifically, within the Willamette Valley, west of the Coast Range, and west of U.S. Highway 101). The proposed solar micrositing area would, however, be located

17

¹⁶⁷ As defined in OAR 660-033-0020, "tract" means one or more contiguous lots or parcels under the same ownership. The Department highlights that because OAR 660-033-0130(38)(g)(A) requires an evaluation of soil conditions on the "subject tract," that such an evaluation may require the review of areas outside of the proposed site boundary area.

1 on arable soils, so the applicant must demonstrate that the proposed solar facility can meet
2 one of the factors listed in (i) through (iii).

3
4 Because the proposed solar site does not contain high-value farmland soils listed in OAR 660-
5 033-0020(8)(b)-(e), the Council finds that factors (i) and (ii) do not apply. The applicant provides
6 evidence to demonstrate compliance with OAR 660-033-0130(38)(h)(F) through factor (iii).

7
8 While the proposed solar micro-siting area does not contain any high-value farmland soils as
9 defined by OAR 660-033-0020(8)(b)-(e), which is cited by OAR 660-033-0130(38)(h)(F), it does
10 contain high-value farmland described at ORS 195.300(10) as well as arable soils. The applicant
11 therefore considered these siting factors, as well as slope, in its evaluation of why the proposed
12 site is better suited to allow continuation of an existing commercial farm or ranching operation
13 on the subject tract than other possible sites also located on the subject tract.

14
15 The applicant states that the solar array needs to be sited on a grade of 10 percent or less.¹⁶⁸
16 The applicant evaluated the subject tract and concluded that the solar siting area is the only
17 contiguous area (i.e., consolidated without large non-buildable gaps) on the subject tract of
18 sufficient size for a 260-MW solar facility (i.e., at least 1,896 acres as proposed) with a grade of
19 less than 10 percent.¹⁶⁹

20
21 In addition, the applicant argues that it is not possible to site the solar arrays completely
22 avoiding the high-value farmland described at ORS 195.300(10) due to the patchy and irregular
23 nature of this high-value farmland on the subject tract. ASC Exhibit K, Figure K-6 shows that
24 high-value farmland described at ORS 195.300(10) at the proposed solar micro-siting area and
25 within the subject tract¹⁷⁰ is patchy, irregular, and distributed throughout the subject tract, and
26 therefore avoiding these areas would reduce the number of solar arrays that could be sited
27 contiguous to one another.

28
29 As explained in the analysis under OAR 660-033-0130(38)(i), the applicant argues,¹⁷¹ and the
30 Council agrees, that siting the solar components solely on nonarable soils present on the
31 subject tract would significantly reduce the project's ability to operate successfully, in part
32 because these areas largely consist of steeper slopes not conducive to siting solar arrays. In
33 addition, because the nonarable soils within the subject tract are patchy and relatively narrow,
34 the solar arrays would need to be spread out across many smaller sites, rather than one
35 contiguous site. Disperse solar arrays would also require substantially more infrastructure to
36 connect the facility components (such as more access roads, collector lines, and potentially
37 additional internal transmission lines).

38

¹⁶⁸ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Pages 84-101 of 158.

¹⁶⁹ NHWAPPDoc40 pASC NRCS Farmland Classification at Solar Site and No Goal 5 Resources 2021-10-07.

¹⁷⁰ The subject tract consists of tracts 3, 8, 11, and 14.

¹⁷¹ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Applicant response to OAR 660-033-0130(38)(h)(F) and OAR 660-033-0130(38)(i)(B).

As previously explained, disperse solar arrays would require substantially more infrastructure to connect the facility components. By consolidating the solar components, the applicant would avoid developing additional infrastructure that would have the potential to impact the farming and ranching operation. For example, as currently proposed, the proposed solar micro-siting area would be adjacent to the northern substation, which would eliminate the need for an additional internal transmission line, thereby resulting in less impacts to farmland and potential division of farm fields. Based upon this information, the Council finds that the solar micro-siting area is better suited to allow continuation of the existing commercial farm and ranching operation on the subject tract than other possible sites also located on the subject tract, consistent with factor (F)(iii).

(G) A study area consisting of lands zoned for exclusive farm use located within one mile measured from the center of the proposed project shall be established and:

(i) If fewer than 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, no further action is necessary.

(ii) When at least 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits, either as a single project or as multiple facilities within the study area, the local government or its designate must find that the photovoltaic solar power generation facility will not materially alter the stability of the overall land use pattern of the area. The stability of the land use pattern will be materially altered if the overall effect of existing and potential photovoltaic solar power generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland, acquire water rights, or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall character of the study area.

OAR 660-033-0130(38)(h)(G) requires an evaluation of photovoltaic solar power generation facility development within 1-mile of the proposed solar micro-siting area. The applicant asserts that no photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the 1-mile study area.¹⁷² Figure G-10 in the applicant's 2017 Notice of Intent shows energy facilities within 10 miles of the site boundary, all of which are farther than 1 mile away. Based on a review of aerial imagery, the Council confirms that there are fewer than 48 acres of other solar PV facilities within 1-mile of the proposed solar micro-siting area. The Council finds that no further action is necessary, consistent with OAR 660-033-0130(38)(h)(G)(i).

(i) For arable lands, a photovoltaic solar power generation facility shall not use, occupy, or cover more than 20 acres. The governing body or its designate must find that the

¹⁷² NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Applicant's response to OAR 660-033-0130(38)(h)(G).

1 following criteria are satisfied in order to approve a photovoltaic solar power generation
2 facility on arable land.

3
4 (A) The project is not located on those high-value farmland soils listed in OAR 660-
5 033-0020(8)(a);

6 (B) The project is not located on those high-value farmland soils listed in OAR 660-
7 033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:

8 i. Nonarable soils are not available on the subject tract;

9 ii. Siting the project on nonarable soils present on the subject tract would
10 significantly reduce the project's ability to operate successfully; or

11 iii. The proposed site is better suited to allow continuation of an existing
12 commercial farm or ranching operation on the subject tract than other
13 possible sites also located on the subject tract, including those comprised of
14 nonarable soils;

15 (C) No more than 12 acres of the project will be sited on high-value farmland soils
16 described at ORS 195.300(10);

17
18 As shown in Table 4: *High-Value, Arable and Nonarable Lands in and Around the Site Boundary*
19 *and Micrositing Corridors* above, the proposed solar micrositing area would use, occupy, and
20 cover 1,840 acres of arable lands, well over the 20-acre threshold established by OAR 660-033-
21 0130(38)(i). As provided under OAR 660-033-0130(38)(k), a solar PV facility that exceeds the
22 threshold established by OAR 660-033-0130(38)(i) requires a goal exception. Therefore, the
23 solar facility components require an exception to Statewide Planning Goal 3. The Council's
24 analysis of the exception request is provided in Section IV.E.1.b *Goal 3 Exception* of this order.
25 The remainder of the OAR 660-033-0130(38) criteria are evaluated here.

26 To satisfy OAR 660-033-0130(38)(i)(A), the solar micrositing area must not be located on those
27 high-value farmland soils listed in OAR 660-033-0020(8)(a). As discussed under OAR 660-033-
28 0130(38)(h)(D), the solar micrositing area would not be located on high-value farmland soils
29 listed in OAR 660-033-0020(8)(a), consistent with OAR 660-033-0130(38)(i)(A).

30 OAR 660-033-0130(38)(i)(B) pertains to high-value farmland soils listed in OAR 660-033-
31 0020(8)(b)-(e) or arable soils. As described under OAR 660-033-0130(38)(h)(F), the solar
32 micrositing area does not contain high-value farmland soils listed in OAR 660-033-0020(8)(b)-
33 (e). It does, however, contain arable soils; therefore, one of the three factors under OAR 660-
34 033-0130(38)(i)(B) must be met.

35 As defined in OAR 660-033-0130(38)(b), "arable soils" means soils that are suitable for
36 cultivation as determined by the governing body or its designate based on substantial evidence
37 in the record of a local land use application, but "arable soils" does not include high-value
38 farmland soils described at ORS 195.300(10) unless otherwise stated. While the applicant does
39 not quantify the amount of arable soils at the site, the applicant does provide the amount of
40 arable land. "Arable land," which includes predominantly cultivated land, is defined separately
41 under OAR 660-033-0130(38) (and is addressed by Council under OAR 660-033-0130(38)(i)) but

1 is useful here to help determine the approximate amount and extent of arable soils within the
2 proposed solar micrositng area. As shown in Table 4: *High-Value, Arable and Nonarable Lands*
3 *in and Around the Site Boundary and Micrositing Corridors* above, the vast majority (97 percent,
4 or 1,840 acres) of the *High-Value, Arable and Nonarable Lands in and Around the Site Boundary*
5 *and Micrositing Corridors* above *High-Value, Arable and Nonarable Lands in and Around the Site*
6 *Boundary and Micrositing Corridors* above consists of arable land. The definition of arable soils
7 – in contrast with arable lands – excludes high-value farmland soils described at ORS
8 195.300(10) unless otherwise stated. Even excluding the entirety of the 242 acres of high-value
9 farmland soils described at ORS 195.300(10) within the solar micrositng area to reach the
10 minimum amount of arable soils, there are a minimum of 1,598 acres of arable soils. Because
11 the solar micrositng area would encompass 1,896 acres, a minimum of 84 percent (1,598
12 divided by 1,896) of the site is comprised of arable soils. Therefore, only a small portion of the
13 1,896-acre solar site is comprised of nonarable soils.

14
15 Because nonarable soils are available on the subject tract, factor (B)(i) does not apply.

16
17 The Council next evaluates factor (B)(ii). ASC Exhibit K Figures K-7 and K-8 show arable land and
18 nonarable land in the proposed solar micrositng area and in the subject tract. As shown on
19 Figure K-8, nonarable land generally follows drainages or steep slopes in relatively narrow
20 corridors. Nonarable soils would cover a somewhat larger extent than shown for nonarable
21 lands in Figures K-7 and K-8, because as previously explained “arable soils” does not include
22 high-value farmland soils described at ORS 195.300(10) unless otherwise stated. However, even
23 excluding the high-value farmland soils shown in Figure K-6 from the area shown as arable
24 lands in Figure K-8 to yield the area of nonarable soils would not provide concentrated areas of
25 nonarable soils upon which to develop the proposed 1,896 acre solar facility. The applicant
26 argues,¹⁷³ and the Council agrees, that siting the solar components solely on nonarable soils
27 present on the subject tract will significantly reduce the project’s ability to operate successfully,
28 in part because these areas largely consist of steeper slopes not conducive to siting solar arrays.
29 In addition, because the nonarable soils within the subject tract are patchy and relatively
30 narrow, the solar arrays would need to be spread out across many smaller sites, rather than
31 one contiguous site. Disperse solar arrays would also require substantially more infrastructure
32 to connect the facility components (such as more access roads, collector lines, and potentially
33 additional internal transmission lines). Based upon this reasoning, the Council finds that siting
34 the solar micrositng area on nonarable soils present on the subject tract would significantly
35 reduce the project’s ability to operate successfully, consistent with factor (B)(ii).

36
37 As previously explained, disperse solar arrays would require substantially more infrastructure to
38 connect the facility components. By consolidating the solar components, the applicant would
39 avoid developing additional infrastructure that would have the potential to impact the farming
40 and ranching operation. For example, as approved, the solar site will be adjacent to the
41 northern substation, which will eliminate the need for an additional internal transmission line,

¹⁷³ NHWAPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Applicant response to OAR 660-033-0130(38)(h)(F) and OAR 660-033-0130(38)(i)(B).

1 thereby resulting in less impacts to farmland and potential division of farm fields. For these
2 reasons, the Council finds that the approved site is better suited to allow continuation of the
3 existing commercial farm and ranching operation on the subject tract than other possible sites
4 also located on the subject tract (including those comprised of nonarable soils), consistent with
5 factor (B)(iii).

6
7 Factor (C) requires that no more than 12 acres of the approved solar microsite area be sited
8 on high-value farmland soils described at ORS 195.300(10). As discussed in the evaluation under
9 OAR 660-033-0130(38)(g), the solar microsite area will be sited on more than 12 acres of high-
10 value farmland described at ORS 195.300(10). The applicant therefore requests an exception to
11 Statewide Planning Goal 3. The Council's analysis of the exception request is provided in Section
12 IV.E.1.b. *Goal 3 Exception* of this order.

- 13
14 *(D) A study area consisting of lands zoned for exclusive farm use located within one*
15 *mile measured from the center of the proposed project shall be established and:*
16 *i. If fewer than 80 acres of photovoltaic solar power generation facilities have*
17 *been constructed or received land use approvals and obtained building*
18 *permits within the study area no further action is necessary.*
19 *ii. When at least 80 acres of photovoltaic solar power generation facilities have*
20 *been constructed or received land use approvals and obtained building*
21 *permits either as a single project or as multiple facilities, within the study*
22 *area the local government or its designate must find that the photovoltaic*
23 *solar power generation facility will not materially alter the stability of the*
24 *overall land use pattern of the area. The stability of the land use pattern will*
25 *be materially altered if the overall effect of existing and potential*
26 *photovoltaic solar power generation facilities will make it more difficult for*
27 *the existing farms and ranches in the area to continue operation due to*
28 *diminished opportunities to expand, purchase or lease farmland, acquire*
29 *water rights or diminish the number of tracts or acreage in farm use in a*
30 *manner that will destabilize the overall character of the study*
31 *area; and*
32

33 OAR 660-033-0130(38)(i)(D) requires an evaluation of photovoltaic solar power generation
34 facility development within 1-mile of the solar microsite area. The applicant asserts that no
35 photovoltaic solar power generation facilities have been constructed or received land use
36 approvals and obtained building permits within the 1-mile study area.¹⁷⁴ Figure G-10 in the
37 applicant's 2017 Notice of Intent shows energy facilities within 10 miles of the site boundary, all
38 of which are farther than 1 mile away. Based on a review of aerial imagery, the Council confirms
39 that there are fewer than 48 acres of other solar PV facilities within 1-mile of the proposed
40 solar microsite area. The Council finds that no further action is necessary, consistent with OAR
41 660-033-0130(38)(i)(D)(i).
42

¹⁷⁴ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Applicant's response to OAR 660-033-0130(38)(i)(D).

1 (E) *The requirements of OAR 660-033-0130(38)(h)(A), (B), (C) and (D) are satisfied.*

2
3 As presented above, the Council finds that the requirements of (A), (B), and (D) are satisfied.
4 Factor (C) requires that no more than 12 acres of the solar micrositing area be sited on high-
5 value farmland soils described at ORS 195.300(10). Because the solar micrositing area would be
6 sited on more than 12 acres of high-value farmland described at ORS 195.300(10), the applicant
7 requests an exception to Statewide Planning Goal 3. The Council's analysis of the exception
8 request is provided in Section IV.E.1.b. *Goal 3 Exception* of this order.

9
10 (j) *For nonarable lands, a photovoltaic solar power generation facility shall not use, occupy,*
11 *or cover more than 320 acres. The governing body or its designate must find that the*
12 *following criteria are satisfied in order to approve a photovoltaic solar power generation*
13 *facility on nonarable land:*

14
15 As shown in Table 4: *High-Value, Arable and Nonarable Lands in and Around the Site Boundary*
16 *and Micrositing Corridors* above, the solar micrositing siting area would use, occupy, or cover 56
17 acres of nonarable lands, far less than the 320-acre threshold established by OAR 660-033-
18 0130(38)(j).

19
20 (A) *Except for electrical cable collection systems connecting the photovoltaic solar*
21 *generation facility to a transmission line, the project is not located on those high-*
22 *value farmland soils listed in OAR 660-033-0020(8)(a);*

23
24 This factor is identical to OAR 660-033-0130(38)(h)(E), which was previously analyzed in this
25 section. As explained under that factor, the Council finds that, with the exception of electrical
26 cable collection systems connecting the solar PV facility to a transmission line, the solar
27 micrositing siting area will not be located on high-value farmland soils listed in OAR 660-033-
28 0020(8)(a). The Council makes the same finding under OAR 660-033-0130(38)(j)(A).

29
30 (B) *The project is not located on those high-value farmland soils listed in OAR 660-*
31 *033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:*

32
33 (i) *Siting the project on nonarable soils present on the subject tract would*
34 *significantly reduce the project's ability to operate successfully; or*

35
36 (ii) *The proposed site is better suited to allow continuation of an existing*
37 *commercial farm or ranching operation on the subject tract as compared to*
38 *other possible sites also located on the subject tract, including sites that are*
39 *comprised of nonarable soils;*

40
41 This factor is identical to factors (ii) and (iii) from OAR 660-033-0130(38)(i)(B), which was
42 previously analyzed in this section. As previously explained, the Council finds that siting the
43 solar micrositing area on nonarable soils present on the subject tract would significantly reduce
44 the ability to operate successfully, and that the approved site is better suited to allow

1 continuation of the existing commercial farm and ranching operation on the subject tract than
2 other possible sites also located on the subject tract (including those comprised of nonarable
3 soils). The Council makes the same findings under OAR 660-033-0130(38)(j)(B).

4
5 *(C) No more than 12 acres of the project will be sited on high-value farmland soils*
6 *described at ORS 195.300(10);*
7

8 As discussed in the evaluation under OAR 660-033-0130(38)(g), the solar micrositng area would
9 be sited on more than 12 acres of high-value farmland described at ORS 195.300(10). The
10 applicant therefore requests an exception to Statewide Planning Goal 3. The Council's analysis
11 of the exception request is provided in Section IV.E.1.b *Goal 3 Exception* of this order.
12

13 *(D) No more than 20 acres of the project will be sited on arable soils;*
14

15 As discussed in the evaluation under OAR 660-033-0130(38)(i), the solar micrositng area would
16 be located on a minimum of 1,598 acres of arable soils. The solar micrositng area would
17 therefore not meet factor (D) and requires an exception to Statewide Planning Goal 3. The
18 Council's analysis of the exception request is provided in Section IV.E.1.b *Goal 3 Exception* of
19 this order.
20

21 *(E) The requirements of OAR 660-033-0130(38)(h)(D) are satisfied;*
22

23 OAR 660-033-0130(38)(h)(D) requires the applicant to demonstrate that the solar facility would
24 not result in the "unabated introduction or spread of noxious weeds and other undesirable
25 weed species." For the reasons discussed under that criterion, the Council finds that the solar
26 micrositng area will not result in the unabated introduction or spread of noxious weeds and
27 other undesirable weed species. The Council finds that OAR 660-033-0130(38)(j)(E) would also
28 be satisfied.
29

30 *(F) If a photovoltaic solar power generation facility is proposed to be developed on*
31 *lands that contain a Goal 5 resource protected under the county's comprehensive*
32 *plan, and the plan does not address conflicts between energy facility*
33 *development and the resource, the applicant and the county, together with any*
34 *state or federal agency responsible for protecting the resource or habitat*
35 *supporting the resource, will cooperatively develop a specific resource*
36 *management plan to mitigate potential development conflicts. If there is no*
37 *program present to protect the listed Goal 5 resource(s) present in the local*
38 *comprehensive plan or implementing ordinances and the applicant and the*
39 *appropriate resource management agency(ies) cannot successfully agree on a*
40 *cooperative resource management plan, the county is responsible for*
41 *determining appropriate mitigation measures; and*
42

43 OAR 660-033-0130(38)(j)(F) first requires a determination of whether the photovoltaic solar
44 power generation facility is proposed to be developed on lands that contain a Goal 5 resource

1 protected under the County's comprehensive plan; if so, additional requirements apply. Based
2 on review of the Umatilla County Comprehensive Plan (last updated in 2017) and Section D of
3 the accompanying Comprehensive Plan Technical Report, last amended in 1984, the applicant
4 concluded that there are no Goal 5 resources in the proposed solar siting area.¹⁷⁵ Figure K-2 of
5 ASC Exhibit K shows that the solar site is not within any overlay zoning districts (e.g., Aggregate
6 Resource Overlay).

7
8 On page D-63 of the Comprehensive Plan Technical Report there is a map that includes a
9 portion of the site boundary, including the solar micrositing area. The map is part of the
10 County's inventory of Habitats of Rare, Threatened, and Endangered Species, and is labeled
11 "Importance: Prairie Falcon nesting area/Curlews." The area specifically called out on the map
12 and in the corresponding Table D-XII, however, is Alkali Canyon, which is outside the solar
13 micrositing area.

14
15 Based on the information provided by the applicant and the Council's review of Section D of the
16 Comprehensive Plan Technical Report, the Council finds that the photovoltaic solar power
17 generation facility is to be developed on lands that do not contain a Goal 5 resource protected
18 under the County's comprehensive plan and that the solar micrositing area would be consistent
19 with OAR 660-033-0130(38)(j)(F).

20
21 *(G) If a proposed photovoltaic solar power generation facility is located on lands*
22 *where, after site specific consultation with an Oregon Department of Fish and*
23 *Wildlife biologist, it is determined that the potential exists for adverse effects to*
24 *state or federal special status species (threatened, endangered, candidate, or*
25 *sensitive) or habitat or to big game winter range or migration corridors, golden*
26 *eagle or prairie falcon nest sites or pigeon springs, the applicant shall conduct a*
27 *site-specific assessment of the subject property in consultation with all*
28 *appropriate state, federal, and tribal wildlife management agencies. A*
29 *professional biologist shall conduct the site-specific assessment by using*
30 *methodologies accepted by the appropriate wildlife management agency and*
31 *shall determine whether adverse effects to special status species or wildlife*
32 *habitats are anticipated. Based on the results of the biologist's report, the site*
33 *shall be designed to avoid adverse effects to state or federal special status*
34 *species or to wildlife habitats as described above. If the applicant's site-specific*
35 *assessment shows that adverse effects cannot be avoided, the applicant and the*
36 *appropriate wildlife management agency will cooperatively develop an*
37 *agreement for project-specific mitigation to offset the potential adverse effects*
38 *of the facility. Where the applicant and the resource management agency cannot*
39 *agree on what mitigation will be carried out, the county is responsible for*
40 *determining appropriate mitigation, if any, required for the facility.*
41

¹⁷⁵ NHWAPPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Applicant's response to OAR 660-033-0130(38)(j)(F), and NHWAPPDoc40 pASC NRCS Farmland Classification at Solar Site and No Goal 5 Resources 2021-10-07.

ASC Exhibits P and Q and Sections IV.H., *Fish and Wildlife Habitat* and IV.I, *Threatened and Endangered Species* of this order provide information relevant to this criterion. The applicant consulted with ODFW's district biologist and ODOE on the appropriate field survey protocols and performed a site-specific assessment of potential adverse impacts to special status species and fish and wildlife habitat. As presented in Section IV.H., *Fish and Wildlife Habitat* and IV.I, *Threatened and Endangered Species* of this order, the Council finds that based on the evidence provided in ASC Exhibits P and Q, and compliance with site certificate conditions, that the site would be designed to mitigate adverse impacts to special status wildlife species and associated wildlife habitat, consistent with OAR 660-033-0130(38)(j)(G).

(k) An exception to the acreage and soil thresholds in subsections (g), (h), (i), and (j) of this section may be taken pursuant to ORS 197.732 and OAR chapter 660, division 4.

As previously discussed, the solar micrositng area will exceed the 12-acre threshold established at OAR 660-033-0130(38)(g) for high-value farmland described at ORS 195.300(10) because it will use, occupy, or cover 242 acres of high-value farmland. In addition, the solar micrositng area will exceed the 20-acre threshold established by OAR 660-033-0130(38)(i) for arable lands, because the facility will use, occupy, and cover 1,840 acres of arable lands.

The solar micrositng area therefore triggers the need for a goal exception through both the OAR 660-033-0130(38)(g) threshold exceedance and the OAR 660-033-0130(38)(i) threshold exceedance.

The Council's evaluation of the applicant's Goal 3 exception request is provided below, in Section IV.E.1.b. *Goal 3 Exception* of this order, and r the Council finds that an exception to Goal 3 is justified.

(l) The county governing body or its designate shall require as a condition of approval for a photovoltaic solar power generation facility, that the project owner sign and record in the deed records for the county a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).

Subject to compliance with the following condition, the Council finds that the facility will comply with OAR 660-033-0130(38)(l):

Land Use Condition 18 (PRE): Prior to construction of solar facility components, the certificate holder, and underlying landowners on whose property the solar facility components are located, shall record in the real property records of Umatilla County a Covenant Not to Sue with regard to generally accepted farming practices on adjacent farmland.

[PRE-LU-14]

1 (m) Nothing in this section shall prevent a county from requiring a bond or other security
2 from a developer or otherwise imposing on a developer the responsibility for retiring the
3 photovoltaic solar power generation facility.
4

5 OAR 660-033-0130(38)(m) allows for the governing body to require a bond or letter of credit for
6 the amount necessary to retire the facility during decommissioning. Retirement and Financial
7 Assurance Condition 4 will require that, prior to construction, the applicant obtain and provide
8 to the Department a bond or letter of credit in the specified amount considered by Council as
9 satisfactory for facility decommissioning. Based upon compliance with this condition, the
10 Council concludes that the requirements under OAR 660-033-0130(38)(m) will be satisfied.
11

12 As discussed above, the solar micrositing area would not comply with OAR 660-033-0130(38)(g)
13 because it will use, occupy, or cover more than 12 acres of high-value farmland (and does not
14 meet either of the exemptions specified in OAR 660-033-0130(38)(g)) and will not comply with
15 OAR 660-033-0130(38)(i) because it will use, occupy, or cover more than 20 acres of arable
16 land. Because the solar micrositing area will not comply with OAR 660-033-0130, it will also not
17 comply with UCDC Section 152.060(FF). As discussed in Section IV.E.1.a. of this order, the
18 Council followed the process under ORS 469.504(1)(B) and finds that the facility does not
19 comply with UCDC Section 152.060(FF), but that an exception to the applicable statewide
20 planning goal is justified under ORS 469.504(2).
21

22 **IV.E.2.c. ORS 215.276 (High Value Farmland Requirements)**

23

24 ORS 215.276 states:
25

26 (1) *As used in this section:*

27 (a) *“Consult” means to make an effort to contact for purpose of notifying the record*
28 *owner of the opportunity to meet.*

29 (b) *“High-value farmland” has the meaning given that term in ORS 195.300.*

30 (c) *“Transmission line” means a linear utility facility by which a utility provider transfers*
31 *the utility product in bulk from a point of origin or generation, or between transfer*
32 *stations, to the point at which the utility product is transferred to distribution lines*
33 *for delivery to end users.*

34 (2) *If the criteria described in ORS 215.275 for siting a utility facility on land zoned for*
35 *exclusive farm use are met for a utility facility that is a transmission line, or if the criteria*
36 *described in ORS 215.274 for siting an associated transmission line are met, the utility*
37 *provider shall, after the route is approved by the siting authorities and before*
38 *construction of the transmission line begins, consult the record owner of high-value*
39 *farmland in the planned route for the purpose of locating and constructing the*
40 *transmission line in a manner that minimizes the impact on farming operations on high-*
41 *value farmland. If the record owner does not respond within two weeks after the first*
42 *documented effort to consult the record owner, the utility provider shall notify the record*
43 *owner by certified mail of the opportunity to consult. If the record owner does not*
44 *respond within two weeks after the certified mail is sent, the utility provider has satisfied*

1 *the provider's obligation to consult.*

2 *(3) The requirement to consult under this section is in addition to and not in lieu of any other*
3 *legally required consultation process.*

4
5 ORS 215.276 requires that, for transmission lines considered a utility facility necessary for
6 public service under ORS 215.275, the utility provider (or certificate holder) consult with record-
7 owners of high value farmland prior to construction to locate and construct the transmission
8 line in a manner that minimizes impacts on high-value farmland operations. In ASC Exhibit K the
9 applicant represents that it would consult landowners in effort to minimize and mitigate
10 potential agricultural impacts.

11
12 ORS 215.276 is specific to landowners of high value farmland agriculture and requires that the
13 utility provider issue a notification of an opportunity to consult via certified mail, if after two
14 weeks of the initial notification, the landowner has not responded. The Council approves
15 specific language be incorporated into the Agricultural Mitigation Plan in Land Use Conditions 2
16 and 3, as presented below:

- 17 • Prior to construction, the applicant shall provide notification to the record
18 owner of any agricultural lands containing high-value farmland, as defined in
19 ORS 195.300(10), of the opportunity to consult with IPC for the purpose of
20 locating and constructing the transmission line in a manner that minimizes
21 impacts to high-value farmland farming operations.
 - 22 ○ The initial notification to the record owner shall allow two weeks to
23 respond to the opportunity to consult with applicant. If the record owner
24 does not respond to applicant within two weeks of the initial notification,
25 applicant shall provide a second notification of the opportunity to consult
26 with applicant via certified mail. If the record owner does not respond
27 within two weeks of the second notification, applicant will have satisfied
28 its obligation to consult pursuant to ORS 215.276(2).

29
30 The Council finds that based upon inclusion of the above-referenced process as a requirement
31 in the draft Agricultural Mitigation Plan (Attachment K-1 of this order, imposed in Land Use
32 Conditions 2 and 3), the applicant would satisfy the requirements of ORS 215.276.

33 34 **Conclusions of Law**

35 Based on the foregoing findings presented in this section and in the Contested Case Order
36 provided in Attachment 1 of this order, and subject to compliance with the site certificate
37 conditions, the Council finds an exception to Goal 3 is justified under OAR 345-022-0030(4)(c)
38 and ORS 469.504(2)(c); therefore, the Council finds that the facility complies with OAR
39 660-033-0130(38)(f) and complies with the applicable statewide planning goal (Goal 3). As such,

subject to the site certificate conditions, the Council finds that the facility complies with the Council's Land Use standard.¹⁷⁶

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:

- (a) National parks, including but not limited to Crater Lake National Park and Fort Clatsop National Memorial;*
- (b) National monuments, including but not limited to John Day Fossil Bed National Monument, Newberry National Volcanic Monument and Oregon Caves National Monument;*
- (c) Wilderness areas established pursuant to The Wilderness Act, 16 U.S.C. 1131 et seq. and areas recommended for designation as wilderness areas pursuant to 43 U.S.C. 1782;*
- (d) National and state wildlife refuges, including but not limited to Ankeny, Bandon Marsh, Baskett Slough, Bear Valley, Cape Meares, Cold Springs, Deer Flat, Hart Mountain, Julia Butler Hansen, Klamath Forest, Lewis and Clark, Lower Klamath, Malheur, McKay Creek, Oregon Islands, Sheldon, Three Arch Rocks, Umatilla, Upper Klamath, and William L. Finley;*
- (e) National coordination areas, including but not limited to Government Island, Ochoco and Summer Lake;*
- (f) National and state fish hatcheries, including but not limited to Eagle Creek and Warm Springs;*
- (g) National recreation and scenic areas, including but not limited to Oregon Dunes National Recreation Area, Hell's Canyon National Recreation Area, and the Oregon Cascades Recreation Area, and Columbia River Gorge National Scenic Area;*
- (h) State parks and waysides as listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway;*
- (i) State natural heritage areas listed in the Oregon Register of Natural Heritage Areas pursuant to ORS 273.581;*
- (j) State estuarine sanctuaries, including but not limited to South Slough Estuarine Sanctuary, OAR Chapter 142;*
- (k) Scenic waterways designated pursuant to ORS 390.826, wild or scenic rivers designated pursuant to 16 U.S.C. 1271 et seq., and those waterways and rivers listed as potentials for designation;*

¹⁷⁶ NHWAPPDoc16 Proposed Contested Case Order 2023-05-12.

- (l) *Experimental areas established by the Rangeland Resources Program, College of Agriculture, Oregon State University: the Prineville site, the Burns (Squaw Butte) site, the Starkey site and the Union site;*
- (m) *Agricultural experimental stations established by the College of Agriculture, Oregon State University, including but not limited to: Coastal Oregon Marine Experiment Station, Astoria Mid-Columbia Agriculture Research and Extension Center, Hood River Agriculture Research and Extension Center, Hermiston Columbia Basin Agriculture Research Center, Pendleton Columbia Basin Agriculture Research Center, Moro North Willamette Research and Extension Center, Aurora East Oregon Agriculture Research Center, Union Malheur Experiment Station, Ontario Eastern Oregon Agriculture Research Center, Burns Eastern Oregon Agriculture Research Center, Squaw Butte Central Oregon Experiment Station, Madras Central Oregon Experiment Station, Powell Butte Central Oregon Experiment Station, Redmond Central Station, Corvallis Coastal Oregon Marine Experiment Station, Newport Southern Oregon Experiment Station, Medford Klamath Experiment Station, Klamath Falls;*
- (n) *Research forests established by the College of Forestry, Oregon State University, including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;*
- (o) *Bureau of Land Management areas of critical environmental concern, outstanding natural areas and research natural areas;*
- (p) *State wildlife areas and management areas identified in OAR chapter 635, Division 8.*
- ***
- (3) *The provisions of section (1) do not apply to transmission lines or natural gas pipelines routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher or containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.*

Findings of Fact

As required under OAR 345-021-0010(1)(L), the applicant identifies the protected areas within the analysis area and evaluates the following potential impacts during facility construction and operation: excessive noise, increased traffic, water use, wastewater disposal, visual impacts of facility structures.¹⁷⁷

As established in the Amended Project Order, the protected areas analysis area includes the area within and extending 20-miles from the proposed site boundary. The applicant's

¹⁷⁷ The facility would not generate any emission plumes and therefore would not result in visual impacts from air emissions. Therefore, visual impacts from air emissions resulting from facility construction or operation, including but not limited to impacts on Class I Areas as described in OAR 340-204-0050, is not applicable and therefore not addressed in this order.

evaluation of protected areas within the analysis area, and potential impacts from construction and operation of the facility to the identified protected areas are provided in ASC Exhibit L.

Evaluation of Applicant's Discovery Measures and Results

As presented in ASC Exhibit L, the applicant identifies protected areas within the analysis area based on review of the BLM's 1989 Baker Resource Management Plan Record of Decision, OSU's extension service website, GIS data and other data available via website searches for the types of protected areas listed in OAR 345-022-0040(1)(a)–(p).¹⁷⁸ Based on review of the applicant's references and mapping sources, the Council finds that the applicant has adequately evaluated the potential protected areas located within the 20-mile analysis area. As established in the Amended Project Order, if significant adverse impacts from the facility could occur to protected areas beyond the analysis area or to resources identified after issuance of this Final Order, the applicant is obligated to assess those impacts.

As presented in ASC Exhibit L, the applicant identifies 18 protected areas within the analysis area, including:

- 4 state wildlife refuges (OAR 345-022-0040(1)(d))
- 5 state fish hatcheries (OAR 345-022-0040(1)(f))
- 2 state parks (OAR 345-022-0040(1)(h))
- 1 state heritage area (OAR 345-022-0040(1)(i))
- 2 agricultural experimental stations (OAR 345-022-0040(1)(m))
- 1 Bureau of Land Management (BLM) Area of Critical Environmental Concern (ACEC) (OAR 345-022-0040(1)(o))
- 3 state wildlife areas (OAR 345-022-0020(1)(p))

Each of the 18 identified protected areas within the analysis area are presented in Table 6 below, in order based on those that are closest to facility infrastructure.

Table 6: Protected Areas within the Analysis Area

Protected Area	340-022-0040(1) Category	Distance from Closest Facility Component (miles)	Facility Component	Direction
Echo Meadows Site, Oregon Trail ACEC	(o)	0.2	Trans. Line	North
		6.4	Turbines	
Oregon State University Agriculture Research and Extension Center	(m)	4.4	Trans. Line	North
		12.4	Turbines	
	(f)	6.2	Trans. Line	North

¹⁷⁸ NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31. Pages 5-13 of 27 and Page 20 of 27.

Table 6: Protected Areas within the Analysis Area

Protected Area	340-022-0040(1) Category	Distance from Closest Facility Component (miles)	Facility Component	Direction
Three Mile Adult Holding (Umatilla Fish Hatchery Satellite Facility)		16.4	Turbines	
Columbia Basin Agricultural Research Center, Pendleton	(m)	6.4	Turbines	East
		19.6	Trans. Line	
Power City Wildlife Area	(p)	7.5	Trans. Line	North
		16.6	Turbines	
Irrigon Wildlife Area	(p)	7.9	Trans. Line	Northwest
		19.2	Turbines	
Cold Springs National Wildlife Refuge	(d)	9.2	Trans. Line	North
		12	Turbines	
Umatilla National Wildlife Refuge	(d)	9.5	Trans. Line	Northwest
		22.4	Turbines	
McKay Creek Wildlife Refuge	(d)	14.9	Trans. Line	East
		9.7	Turbines	
Irrigon Fish Hatchery	(f)	9.6	Trans. Line	Northwest
		22.6	Turbines	
Hat Rock State Park	(h)	12.2	Trans. Line	North
		16.6	Turbines	
Umatilla Fish Hatchery	(f)	12.9	Trans. Line	Northwest
		25.9	Turbines	
Coyote Springs Wildlife Area	(p)	12.9	Trans. Line	Northwest
		24.8	Turbines	
McNary National Wildlife Refuge	(d)	14.7	Trans. Line	North

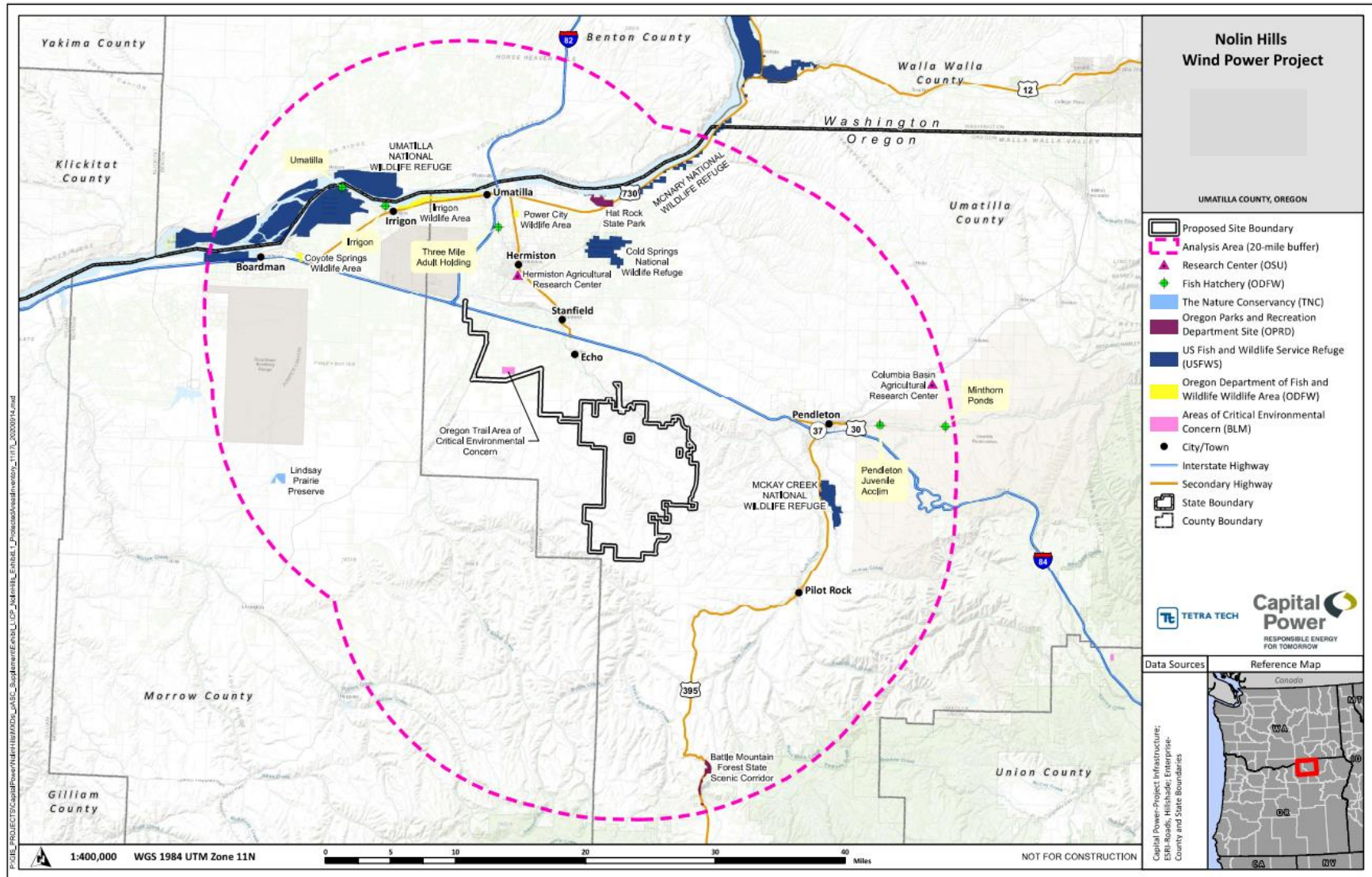
Table 6: Protected Areas within the Analysis Area

Protected Area	340-022-0040(1) Category	Distance from Closest Facility Component (miles)	Facility Component	Direction
		17.6	Turbines	
Pendleton Juvenile Acclimation (Umatilla Fish Hatchery Satellite Facility)	(f)	14.8	Turbines	East
		18.9	Trans. Line	
Lindsay Prairie Preserve	(i)	16.1	Trans. Line	West
		23.1	Turbines	
Battle Mountain Forest State Scenic Corridor	(h)	16.4	Turbines	Southeast
		25.6	Trans. Line	
Minthorn Ponds (Umatilla Fish Hatchery Satellite Facility)	(f)	19.7	Turbines	East
		24.0	Trans. Line	

As presented in Table 6: *Protected Areas within the Analysis Area*, the nearest protected area (Echo Meadows site) would be located approximately 0.2 miles north of the proposed 230 kV UEC transmission line route.¹⁷⁹ From wind turbine locations, the nearest protected area is over 6 miles away. From solar photovoltaic energy generation components, protected areas would be at greater distances than from wind turbine components. The facility site boundary and protected areas within the analysis area are presented in Figure 6 below.

¹⁷⁹ NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31. Pages 5-13 of 27.

Figure 6: Location of Protected Areas within the Analysis Area



OAR 345-022-0040(1) requires the Council to find that the facility would not be likely to result in significant adverse impacts from construction and operation, including but not limited to, noise, traffic, water use, wastewater disposal, visual impacts from facility structures, and visual impacts from air emissions to a designated protected area.¹⁸⁰ The Council evaluated the applicant's facts and impact assessment and makes findings of fact and reasoning below to support Council's conclusions of whether the applicant has demonstrated compliance with the standard.

IV.F.1. Potential Noise Impacts at Protected Areas

Summary and Evaluation of Applicant's Noise Impact Methodology

The applicant's evaluation of facility construction-noise impacts is based on the following:

- 12 construction vehicles/equipment
- Noise levels per equipment, ranging from 73 to 88 dBA and usage rates of 16 to 50% obtained from or consistent with the Federal Highway Administration's (FHWA) 2006 Roadway Construction Noise Model
- Composite L_{eq} noise level¹⁸¹ estimated based on 12 pieces of equipment, applied usage rates for an 8-hr day, at 2,000 feet

The Council finds that the applicant's methods for evaluating construction noise impacts are acceptable for the following reasons. The Council reviewed the 2006 Federal Highways Administration (FHWA) Roadway Construction Noise Model and affirms that the equipment noise levels and usage rates used by the applicant are accurate or more conservative than is used in the noise model. The assumed daily use of 12 vehicles in any one area is reasonably conservative, given the pace at which activity can occur and represented maximum size of temporary disturbance work areas. The composite noise level was generated by employing the construction noise calculation methodology described in the U.S. Federal Highway Administration Construction Noise Handbook. This approach is reliable as a noise estimator because it uses computations and sourced inputs (i.e., equipment noise levels and usage rates from the FHWA Roadway Construction Noise Model).

The applicant's evaluation of facility operational-noise impacts is based on an assumed ambient noise level of 26 dBA and the following noise levels from facility components:

¹⁸⁰ OAR 345-001-0010(53) defines "Significant" as "...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 resource 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."

¹⁸¹ The Council finds that estimating noise in L_{eq} is the most appropriate metric because of the intermittent nature of construction equipment operation and allows for the prediction to be based on a compilation of varying noise levels throughout an 8-hr day.

- 112 wind turbines (GE 3.0 – 140), each at 108 dBA (includes confidence interval of k = 2 dBA)¹⁸²
- 2 substation GSU transformers (222 MVA), each at 105 dBA
- 97 solar inverter blocks at 97 dBA, including 5 solar panel inverters and distribution transformer; solar DC converter at 96 dBA; and BESS at 98 dBA (represented in ASC Exhibit X Figure X-2 as “DC BESS Inverter Block”)
- 1 substation GSU transformer (300 MVA) at 103 dBA
- 230 kV transmission line, during fair and foul weather events

Based on the above-referenced noise levels, the applicant utilized two programs to analyze potential noise impacts – the DataKustic GmbH’s computer-aided noise abatement program (CadnaA) v 2020 MR1 and the Corona and Field Effects Program Version 3 (Corona 3). The CadnaA is a comprehensive three-dimensional acoustic software model that conforms to the International Organization for Standardization (ISO) standard ISO 9613-2 “Attenuation of Sound during Propagation Outdoors.”¹⁸³ The Corona 3 is a DOS-based computer model developed by the BPA and produces estimates of electric and magnetic fields, and audible noise, based on line voltage, load flow, physical dimensions of the line, and site elevation.¹⁸⁴

The Council finds that the applicant’s methods for evaluating operational noise impacts are acceptable for the following reasons. CadnaA is an established model that has been relied upon for the evaluation of noise impacts for numerous EFSC decisions on site certificates¹⁸⁵ and represents statistical-computations with sourced inputs. The Corona 3 model has been developed by BPA. In this model, Corona performance is calculated using empirical equations that have been developed by BPA over several years from the results of measurements on numerous high-voltage lines. The validity of this approach for corona-generated audible noise has been demonstrated through comparisons with measurements on other lines all over the United States.¹⁸⁶

Construction

The nearest protected area is the Echo Meadows Interpretive Site, 0.2-miles from the site boundary of the proposed 230 kV UEC transmission line. Echo Meadows is 320-acre, BLM-

¹⁸² NWHAPPDoc2-23 ASC Exhibit X Noise_2022-01-31. Page 21-22 of 46.

¹⁸³ NWHAPPDoc2-23 ASC Exhibit X. Noise_2022-01-31. Page 19-20 of 46.

¹⁸⁴ *Id.*

¹⁸⁵ MSEFDoc4-1 Final Order on ASC for Madras Solar Energy Facility 2021-08-02. Available: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/MSE.aspx>. BSPAPPDoc2 Final Order on ASC for Bakeoven Solar Project 2020-04-24. Available: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/BSP.aspx>

¹⁸⁶ Bonneville Power Administration. Klondike III/Biglow Canyon Wind Integration Project, Appendix C: Electrical Effects, Page 1. 2006. Accessed online: <https://legacy.bpa.gov/efw/Analysis/NEPADocuments/nepa/Klondike/AppendixC-EMF.pdf> Date Accessed: 2022-03-09.

1 managed Area of Critical Environmental Concern (ACEC). It is protected for preservation and
2 enjoyment of the remaining evidence of the Oregon Trail. The National Park Service (NPS) has
3 designated the site as significant on the Oregon National Historic Trail (ONHT) as the primary
4 route of the Oregon trail which passes directly through the Echo Meadows site. Visitors can
5 hike along a paved trail to see nearly one mile of intact wagon ruts and read interpretive signs
6 about the area and its history. The site receives fairly low levels of public use, up to an
7 estimated maximum of about 850 visitors per year.¹⁸⁷

8
9 Based on the Council's review of Google Earth, the parking lot area and first set of interpretive
10 signs are less than 1,000 feet away. The applicant estimated a daily average noise level, in L_{eq} ,
11 of 48 dBA at 2,000 feet. Because the parking lot and first set of interpretive signs appear to be
12 half the distance used by the applicant to assess the L_{eq} composite noise level for construction,
13 the Council estimates the L_{eq} based on half the distance, using the accepted 3-dBA increase per
14 halving of distance, at 51 dBA. Based on ASC Exhibit X Table X-1, a noise level of 51 dBA would
15 be similar to a quiet rural residence or light auto traffic at a distance of 100-feet.

16
17 Facility construction noise of 51 dBA could impact the quality of visitor experience at the Echo
18 Meadows site. Therefore, the Council imposes the following condition requiring that, prior to
19 construction of the 230 kV UEC Cottonwood Route, if selected, that the applicant notify the
20 BLM land manager of the construction schedule and potential noise impacts in efforts to alert
21 potential visitors and minimize potential noise disturbance impacts at the Echo Meadows site
22 (see Protected Areas Condition 1 below).

23
24 **Protected Areas Condition 1 (PRE):** Prior to construction of the 230 kV UEC Cottonwood
25 transmission line, if selected as the final design transmission line option, the certificate
26 holder shall provide notice to the Department and BLM land manager for the Echo
27 Meadows site of the 230 kV UEC Cottonwood transmission line construction schedule,
28 potential construction-related noise impacts, and contact information to report noise
29 complaints.

30 [PRE-PA-01]

31
32 **Protected Areas Condition 2 (CON):** During construction of the 230 kV UEC Cottonwood
33 transmission line, if selected as the final design transmission line option, the certificate
34 holder shall require contractors to have noise complaint and response signage on or
35 near their equipment in a manner accessible to users of the Echo Meadows site. If noise
36 complaints are received, contractors must attempt to reduce equipment-related noise
37 levels, to the extent practicable.

38 [CON-PA-01]

39

¹⁸⁷ NHWAPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31 Page 13-14 of 27. Personal communication cited:
Rachael Katz, Tetra Tech, and Brian Woolf, BLM Vale District, Baker Office, August 6, 2018.

1 Based upon compliance with the above referenced site certificate conditions, the Council finds
2 that facility construction noise would not be likely to result in significant adverse impacts at the
3 Echo Meadows site.¹⁸⁸

4
5 If the proposed 230 kV UEC Cottonwood transmission line route is not selected, the next closest
6 protected area to construction related noise impacts would be over 6-miles away. Based on a
7 distance of 6-miles and noise attenuation of 3 dBA per doubling of distance, noise from facility
8 construction would not be audible at any other protected areas within the analysis area. For
9 these reasons, the Council finds that facility construction noise would not be likely to result in
10 significant, adverse impacts at any other protected areas within the analysis area.

11 *Operations*

12
13
14 As presented in Table 6 above, the nearest protected area to facility infrastructure would be
15 the BLM's Echo Meadows site¹⁸⁹, approximately 1,056 feet (0.2 miles) from the proposed 230
16 kV UEC transmission line. Therefore, the potential for facility noise impacts would occur from
17 corona noise generating from the proposed 230 kV transmission line during rainy conditions.
18 Based on ASC Exhibit X Figure X-1, corona noise impacts are estimated at 35 dBA at 200 feet. At
19 a distance of 1,000-feet, based on noise attenuation of 3 dBA per doubling of distance, noise
20 levels are expected to range from 27 to 30 dBA during rainy conditions, and below 26 dBA
21 (accepted ambient noise levels) during fair conditions. As presented in ASC Exhibit X Table X-1,
22 noise levels ranging from 25-30 dBA are considered extremely quiet, similar to a quiet library at
23 15 feet. The Council finds that corona noise impacts at a distance of over 1,000-feet, which are
24 considered extremely quiet, would not be likely to result in significant adverse impacts at the
25 Echo Meadows site.

26
27 Acoustic modeling results for all facility components identify a maximum noise level of 38 dBA
28 within 200-feet. Using this noise level, the distance of the next closest protected area of 6-miles
29 and noise attenuation of 3 dBA per doubling of distance, noise from facility operation would
30 not be audible at any other protected areas within the analysis area. For these reasons, the
31 Council finds that facility operational noise would not be likely to result in significant, adverse
32 impacts at any other protected areas within the analysis area.

¹⁸⁸ NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31. In ASC Exhibit L, the applicant presents that noise levels from facility construction, of 48 dBA, at the parking lot area/interpretive signs of the Echo Meadows site would not result in significant adverse impacts because: this level of noise is below industrial limits; it would be short-term and temporary (approximately 3-weeks); and noise levels would be similar to O&M noise levels of the existing distribution line. The Department disagrees with this reasoning – industrial noise limits are not the standard to evaluate potential significance of construction-related noise impacts at protected areas (i.e. sets a very high standard for a potential adverse impacts to protected areas and are not in the same units – L_{eq} compared to L_1 , L_{10} and L_{50}); construction noise is by nature short-term and temporary and therefore this argument would apply to all construction noise evaluated under the standard (i.e. sets a very low standard for potential adverse impacts to protected areas); and the applicant has not provided any evidence to substantiate an understanding of routine O&M noise for the existing distribution line.

¹⁸⁹ The Echo Meadows site is a 320 acre site managed for the preservation and enjoyment of the remaining evidence of the Oregon Trail.

IV.F.2. Potential Traffic Impacts at Protected Areas

Summary of Applicant's Traffic Impact Methodology

The applicant estimated maximum number of daily worker and truck trips and primary haul routes in ASC Exhibit U. Maximum number of daily one-way trips from facility construction is estimated at 1,034. Facility construction traffic would utilize I-84, I-82, US Highway 395 (US395), County Road (CR) 1350 from US-395, and CR-1361, CR-1362, CR-1363, and CR-1394.¹⁹⁰ Maximum number of trips per day from facility operation is estimated at 30 one-way trips.

Construction

The applicant identifies that, based on the access roads to the protected areas identified in Table 6 above, construction-related traffic would use haul routes that provide access to the access roads for the Echo Meadows site and the McKay Wildlife Refuge, including US-395 and Oregon Trail Road (OR-320). Traffic impacts to the Echo Meadows site include temporary (15 minutes) closure of the gravel road going north from OR-320; temporary closure of OR-320 for 1-2 days; and, congestion from helicopter use for the I-84 crossing. Traffic impacts to the McKay Wildlife Refuge include creased traffic congestion and delayed access to the site.

To minimize these traffic-related impacts, the applicant represents that it would require contractors to implement numerous best management practices (BMPs), including:

- Coordinating the timing and locations of road closures or oversize load movements in advance with emergency services such as fire, paramedics, and essential services such as mail delivery and school buses.
- Maintaining emergency vehicle access to private property.
- Posting signs on county- and state-maintained roads, where appropriate, to alert motorists of construction and warn them of slow, merging, or oversize traffic.
- Using traffic control measures such as traffic control flaggers, warning signs, lights, and barriers during construction to ensure safety and to minimize localized traffic congestion. These measures would be required at locations and during times when trucks would be entering or exiting highways frequently.
- Notifying landowners prior to the start of construction near residences, including helicopter use within one mile of residences.
- Restoring residential areas as soon as possible, and fencing construction areas near residences at the end of the construction day.

These BMPs have been incorporated into a draft Construction Traffic Management Plan and are to be finalized, based on final facility design, construction methods and haul routes, and imposed in Public Services Conditions 1 and 2. Based on compliance with the requirements of

¹⁹⁰ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 12-24 of 231.

Public Services Conditions 1 and 2, the Council finds that construction-related traffic impacts would not be likely to result in significant, adverse impacts at the Echo Meadows site or McKay Wildlife Refuge. Because the applicant did not identify any other access roads serving protected areas within the analysis area that would be impacted by construction-related traffic and use of haul routes, the Council finds that facility construction traffic would not be likely to result in significant, adverse impacts at any other protected area within the analysis area.

Operation

Routine O&M of the facility could include equipment deliveries with oversized haul trucks, but generally is anticipated to result in a maximum of 30 daily, one-way light-duty vehicle trips. The Council finds that this level of traffic increase will not be likely to result in significant, adverse impacts at any protected area within the analysis area because the primary routes have sufficient capacity to accept this increase in volume without impacting the quality of traffic service.¹⁹¹

IV.F.3. Potential Water Use Impacts at Protected Areas

Construction

Facility construction will use approximately 100 million gallons (Mgal) of water per year: primarily for dust suppression, concrete mixing for foundations, road construction and site preparation. None of the construction-water will be obtained or withdrawn from a protected area. Protected areas may be supplied water from service providers that would also supply water for facility construction. ASC Exhibit O Attachment O-1 includes letters from 2020 from the cities of Pendleton, Hermiston, and Echo Water Departments. The City of Hermiston confirmed that it can provide up to 125,000 gallons per day up to 68 million gallons for facility construction. The City of Echo also provided a letter stating they could provide up to 125,000 gallons per day (with no limit stated) for the construction of the facility. The City of Pendleton's 2020 letter confirmed the ability to provide 134,000 gallons per day up to 71,000,000 gallons for construction. This was re-affirmed by the City of Pendleton in the response received by ODOE in 2022.¹⁹²

The Council finds that because facility construction water will not be obtained or withdrawn from any protected area within the analysis area and service providers have affirmed on the record of the ASC that they have the legal ability and capacity to serve the facility's construction water needs, that facility construction water use will not be likely to result in significant, adverse impacts at any protected area within the analysis area.

Operations

¹⁹¹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 20 of 231, Table U-5.

¹⁹² NHWAPPDoc5 ASC Reviewing Agency Comment_City of Pendleton_Water_Tarter 2022-02-02.

1 Facility operations will use approximately 1.12 million gallons of water per year for solar panel
2 washing¹⁹³ with this water to be purchased from City of Hermiston, City of Pendleton, or the
3 City of Echo.¹⁹⁴ In addition, the O&M building will be served by a groundwater well that will be
4 limited to 5,000-gallons per day. None of the operational-water will be obtained or withdrawn
5 from a protected area. Protected areas may rely upon shared groundwater. However, a
6 withdrawal of 5,000-gallons per day is a level determined exempt from Oregon Department of
7 Water Resources permit requirements, which the Council finds to be a de minimus impact level.
8 For these reasons, the Council finds that facility operational water use will not be likely to result
9 in significant, adverse impacts at any protected area within the analysis area.

11 IV.F.4. Potential Wastewater Impacts at Protected Areas

13 *Construction*

15 Facility construction is anticipated to produce wastewater from concrete washout, including
16 soil berms and concrete solids; vehicle cleaning; dewatering discharge; and sanitary
17 wastewater. The applicant quantified the potential wastewater from concrete washout at up to
18 1,018 gallons per day or 549,905 gallons per year (based on 25% of total water used during
19 foundation construction). The applicant's proposed management of construction wastewater
20 includes burying the concrete washout water as part of backfilling foundations. Concrete
21 pouring can contribute suspended solids and heavy metals to stormwater runoff and cause pH
22 increases in receiving waters.¹⁹⁵ For this reason, any on-site concrete or washout disposal must
23 be conducted in accordance with OAR 340-093-0080 which requires DEQ approval of a permit
24 exemption for materials substantially similar to clean fill; and infiltration and evaporation in
25 accordance with a DEQ-issued NPDES 1200-C permit. DEQ recommends the use of an
26 infiltration pit or tank to capture and hold concrete washout as a method for capturing and
27 neutralizing high pH materials to prior to any disposal.¹⁹⁶ Sanitary wastewater would be
28 managed by a licensed subcontractor. Applicant affirms that wastewater generated onsite
29 would not affect streams, wetlands or groundwater supplies.

31 As presented in Section IV.N. *Waste Minimization*, the Council imposes Waste Minimization
32 Condition 3, which will require that any washwater disposed onsite be appropriately evaluated
33 to minimize any potential groundwater contamination issues. Based on compliance with Waste
34 Minimization Condition 3, the Council finds that facility construction wastewater will not be
35 likely to result in significant, adverse impacts at any protected area within the analysis area.

37 *Operation*

¹⁹³ NHWAPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 7-9 of 17.

¹⁹⁴ NHWAPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 13-17 of 17.

¹⁹⁵ Oregon Department of Environmental Quality. Construction Stormwater Best Management Practices Manual. 1200-C NPDES General Permit. Water Quality Permitting Department. 2021-02-01, p. 50.

¹⁹⁶ Oregon Department of Environmental Quality. Construction Stormwater Best Management Practices Manual. 1200-C NPDES General Permit. Water Quality Permitting Department. 2021-02-01, p. 50.

1 Facility operations will produce wastewater from solar panel washing and nontoxic ionized
2 solution (if flow battery technology is selected for the proposed BESS). Water for washing solar
3 panels will require an estimated one gallon per solar module, for a total of approximately
4 1,120,000 gallons per year during operations.¹⁹⁷ The applicant represents that the solar panel
5 washwater will not contain solvents and will be discharged via evaporation and seepage into
6 the ground. The nontoxic ionized solution will be hauled offsite by a licensed hauler and
7 disposed of offsite at a licensed facility.

8
9 As presented in Section IV.N. *Waste Minimization*, the Council imposes Waste Minimization
10 Condition 7 which will require that any washwater disposed onsite be appropriately evaluated
11 to minimize any potential groundwater contamination issues. Based on compliance with Waste
12 Minimization Condition 7, the Council finds that facility operational wastewater will not be
13 likely to result in significant, adverse impacts at any protected area within the analysis area.

14 15 IV.F.5. Potential Visual Impacts at Protected Areas

16 17 *Summary and Evaluation of Applicant's Visual Impact Methodology*

18
19 In ASC Exhibit L, the applicant provides a zone of visual influence (ZVI) analysis (also known as a
20 viewshed or visibility analysis), using Environmental Systems Research Institute ArcGIS
21 software, to identify the areas from which the facility wind turbines might be visible. The ZVI
22 "bare-earth" modeling approach is based only on the effects of terrain (topography) on
23 visibility. The model does not account for the effects of distance, lighting, weather, and
24 atmospheric attenuation factors that diminish visibility under actual field conditions. A bare-
25 earth analysis also does not account for the effects of vegetation or buildings, which can in
26 practice block or screen views in some places.

27
28 To assess the potential visibility of the structures, the applicant conducted a ZVI analysis for the
29 turbine layout assuming 100 percent maximum blade tip height (MBTH), which is 496 feet (See
30 Exhibit L, Figure L-2). The ZVI analysis also addressed potential visibility of the 230-kV
31 transmission lines. ASC Exhibit L Figures L-3, L-4, and L-5 show the range of visibility for the UEC
32 Cottonwood, BPA Stanfield, and internal transmission line routes, respectively.

33 *Potential Visual Impacts of Proposed Facility Structures*

34
35 Based on the results of the ZVI analysis, some portions of the facility would be visible from 15 of
36 the 18 protected areas in the analysis area (see Exhibit L, Table L-1). In some of these protected
37 areas, visibility is characterized as limited, meaning that there will be no views of the facility
38 from a substantial portion of the protected area.¹⁹⁸ The ZVI shows that the facility would be
39 visible from all but the Irrigon State Wildlife Area, the Umatilla and Pendleton Juvenile
40 Acclimation Fish Hatcheries.

41

¹⁹⁷ NHWAPPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 7-9 of 17.

¹⁹⁸ NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31. Pages 16-19 of 27, Section 4.4.

1 Based upon the ZVI analysis, the applicant identifies two protected areas that would have
2 foreground to middle-ground views of facility components (from a distance of up to 0.5 mile for
3 foreground, and 0.5 to 5 miles for middle-ground). In both cases, the foreground to middle-
4 ground viewing distance is the view from the protected area to the proposed 230 kV UEC
5 Cottonwood transmission line. Views of facility wind turbines from either of these protected
6 areas would be at a background distance of over 6 miles.¹⁹⁹ Potential impacts of facility visibility
7 is presented below.

8 9 Echo Meadows ACEC

10
11 The ZVI analysis demonstrates that, at the Echo Meadows ACEC, the proposed 230 kV UEC
12 Cottonwood Transmission line route (0.2 mile) would be visible at a foreground viewing
13 distance and wind turbines would be visible at a variable visibility at a background viewing
14 distance (6.4 miles or more). In ASC Exhibit R Figure R-6, the applicant provides photo
15 simulations of the proposed 230 kV UEC transmission line route from the Echo Meadows site.
16 These simulations demonstrate the existing viewshed as inclusive of wind turbines (from other
17 facilities), existing UEC and other power lines, agricultural structures, and multiple center-pivot
18 agricultural irrigation systems. The photo simulation also demonstrates that the proposed 230
19 kV UEC transmission line route would not be visible when visitors are oriented toward the
20 remnant Oregon Trail ruts. However, where not screened by topography, the proposed
21 transmission line would introduce new, moderately contrasting middle-ground and background
22 features in the viewshed of Echo Meadows.

23
24 Based on review of the applicant's ZVI analysis and photo simulation, consideration of the
25 existing viewshed, and BLM comments affirming that visibility of the transmission line would
26 not be expected to impact user experience²⁰⁰, the Council finds that facility visibility would not
27 impact the use or enjoyment of the resource by the public and therefore would not be likely to
28 result in a significant adverse impacts to the Echo Meadows site.

29 30 Hermiston Agricultural Research Center

31
32 The ZVI indicates potential visibility of the proposed 230 kV UEC Cottonwood transmission line
33 route, at a distance of 4.4 miles, and unlikely visibility of facility wind turbines from the
34 Hermiston Agricultural Research Center (HARC). The HARC is located just outside of a more
35 urbanized area (Hermiston) and among industrial agriculture. Users of the center are engaged
36 in focused agricultural activities. There are no management goals or other research objectives
37 applicable to viewshed or scenic values for the HARC.

¹⁹⁹ Id.

²⁰⁰ NHWAPPDoc3-12 pASC BLM comment Protected Areas impacts Echo Meadows Woolf 2021-04-30. BLM's Outdoor Recreation Planner Brian Woolf stated the that proposed transmission line would be in "conformance with the BLM's visual resource zoning for that viewshed."

1 The applicant represents that views of the facility from the HARC would be in context of the
2 current viewshed with existing urban/industrial development, nearby highways, transmission
3 lines, and existing wind turbines. Based on review of ASC Exhibit L Figure L-2 and the
4 description of the existing viewshed, the Council agrees. Based on review of the ZVI, the
5 description of the existing viewshed, and use and values of the HARC, the Council finds that the
6 proposed 230 kV UEC Cottonwood transmission line and wind turbines, while visible, would not
7 be prominent features and would therefore not be likely to result in significant, adverse visual
8 impacts at HARC.

10 **Conclusions of Law**

12 Based on the foregoing findings of facts, reasoning, and conditions, the Council concludes that,
13 taking into account mitigation, the design, construction and operation of the facility would not
14 be likely to result in significant adverse impacts to any protected areas, in compliance with the
15 Council's Protected Area standard.

17 **IV.G. Retirement and Financial Assurance: OAR 345-022-0050**

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

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

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

29 **Findings of Fact**

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

32 OAR 345-022-0050(1) requires the Council to find that the facility site can be restored to a
33 useful non-hazardous condition at the end of the facility's useful life, or if construction of the
34 facility were to be halted prior to completion. In ASC Exhibit W, the applicant estimates the
35 facility's useful life to be "at least 30 years".²⁰¹

37 The Council's findings of fact are based on: 1) the potential risks and hazards associated with
38 facility construction and operation that could impact site restoration, and the adequacy of
39 minimizing those risks from the applicant's proposed mitigation, Council's adopted and
40 mandatory conditions; 2) the adequacy of the applicant's identified tasks and actions for
41 decommissioning and site restoration based on inclusion of all facility components and tasks;

²⁰¹ NHWAPPDoc2-22 ASC Exhibit W. Retirement_2022-01-31. Pages 5-6 of 49.

and 3) the adequacy of the applicant's decommissioning cost estimate based on methods, assumptions and justification.

Evaluation of Potential Construction and Operational Risks to Site Restoration

Facility construction and operation include risks that could impact the applicant's ability to restore the site to a useful, nonhazardous condition. Potential risks to site restoration include erosion, compaction, soil contamination, invasion of noxious weeds and failed revegetation of temporary impacts. As evaluated in Section IV.D., *Soil Protection* of this order, potential impacts to soils include erosion, compaction, restoration and contamination from unintentional spills. To minimize these potential risks, the Council imposes Soil Protection Conditions 2 and 5 requiring that, during construction, the applicant adhere to the requirements of a DEQ-issued 1200-C NPDES permit; and that, prior to construction or operation, it would finalize and implement a Spill Prevention, Control, and Countermeasures (SPCC) and Hazardous Materials Spill Prevention Program.

As evaluated in Section IV.H., *Fish and Wildlife Habitat* of this order, potential impacts to lands include temporary habitat loss. To minimize these risks, the Council imposes Fish and Wildlife Habitat Condition 1 requiring that, prior to construction, the applicant finalize the Revegetation and Noxious Weed Plan, to be implemented during and post-construction. The Revegetation and Noxious Weed Plan (Attachment P-2) includes requirements to revegetate temporarily impacted habitat and to pre-treat, control and monitor noxious weeds within disturbance areas.

As evaluated in Section IV.B., *Organizational Expertise* and Section IV.M., *Public Services* of this order, facility construction and operation could result in fire risk hazards. To minimize these risks, the Council requires that the applicant implement and adhere to the requirements of a Fire Prevention, Suppression and Emergency Management Plan or contractor provided Emergency Management Plan that includes the provisions identified in Attachments U-2.

The Council's rules include several mandatory site certificate conditions relating to the obligation of an applicant (certificate holder) to prevent the development of conditions on the site that would preclude restoration of the site and requiring the applicant (certificate holder) to obtain Council approval of a retirement plan in the event that the facility ceases construction or operation, which are as follows:

Retirement and Financial Assurance Condition 1 (GEN): 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.

[GEN-RT-01, Mandatory Condition OAR 345-025-0006(7)]

Retirement and Financial Assurance Condition 2 (RET): The certificate holder shall retire the facility if the certificate holder permanently ceases construction or operation of the

1 facility. The certificate holder shall retire the facility according to a final retirement plan
2 approved by the Council, as described in OAR 345-027-0110. The certificate holder shall pay
3 the actual cost to restore the site to a useful, nonhazardous condition at the time of
4 retirement, notwithstanding the Council's approval in the site certificate of an estimated
5 amount required to restore the site.

6 [RET-RT-01, Mandatory Condition OAR 345-025-0006(9)]
7

8 **Retirement and Financial Assurance Condition 3 (GEN):** If the Council finds that the
9 certificate holder has permanently ceased construction or operation of the facility without
10 retiring the facility according to a final retirement plan approved by the Council, as
11 described in OAR 345-027-0110, the Council shall notify the certificate holder and request
12 that the certificate holder submit a proposed final retirement plan to the Department
13 within a reasonable time not to exceed 90 days. If the certificate holder does not submit a
14 proposed final retirement plan by the specified date, the Council may direct the
15 Department to prepare a proposed final retirement plan for the Council's approval.
16

17 Upon the Council's approval of the final retirement plan, the Council may draw on the bond
18 or letter of credit described in OAR 345-025-0006(8) to restore the site to a useful,
19 nonhazardous condition according to the final retirement plan, in addition to any penalties
20 the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or
21 letter of credit is insufficient to pay the actual cost of retirement, the certificate holder shall
22 pay any additional cost necessary to restore the site to a useful, nonhazardous condition.
23 After completion of site restoration, the Council shall issue an order to terminate the site
24 certificate if the Council finds that the facility has been retired according to the approved
25 final retirement plan.

26 [GEN-RT-02, Mandatory Condition OAR 345-025-0006(16)]
27

28 Based on the findings of fact presented above, and compliance with the Council's mandatory
29 site certificate conditions and the Council imposed conditions, the Council finds that potential
30 risks to site restoration from facility construction and operation will be minimized and will not
31 impact the applicant's ability to restore the site to a useful, nonhazardous condition at the end
32 of the facility's useful life or upon cessation of construction or operation.
33

34 Evaluation of Applicant's Tasks and Actions for Decommissioning and Site Restoration 35

36 The applicant presents tasks and actions necessary for facility decommissioning and site
37 restoration in ASC Exhibit W. A summary of high-level tasks and actions is presented in Table 7:
38 *Facility Decommissioning Tasks and Cost Estimate* below and generally includes the following:
39

- 40 • Dismantle aboveground structures (such as wind turbines, met towers, solar and battery
41 components, aboveground electrical equipment including collector lines transmission
42 lines and poles, and the O&M building and substations). Remove components from site
43 for recycle, sale or disposal.

- Electrical components including substations, collector lines, and transmission lines, along with their support structures would be dismantled.
- Subsurface features including underground collector lines and concrete foundations would be removed to a minimum of 3 feet below ground surface or as agreed with the landowner, to allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes.
- Access roads would be reclaimed by regrading and removal of road surfaces, and surface soils restored to original conditions, based on landowner consultation. If the landowner prefers to retain roads, they would be left in place. Reclamation procedures would be based on site specific requirements and techniques commonly employed at the time the area is to be reclaimed. As appropriate and based on intended use of the land following decommissioning, the land would be reseeded in accordance with a Revegetation and Noxious Weed Plan.
- Fluids would be drained onsite and transported offsite for disposal at a licensed facility, if flow batteries are selected for the proposed BESS. Containers would be recycled or disposed at an approved facility.

The Council reviewed the above-summarized tasks and actions with the more-detailed line-item breakdown presented in ASC Exhibit W-1 and compared those details against the information presented in ASC Exhibit B (Project Description), C (Project Location – Disturbance) and G (Materials Inventory). Based on review of these materials, the Council concludes that the information is consistent across relevant exhibits. For this reason, the Council finds that the tasks and actions accurately represent facility decommissioning and site restoration.

Evaluation of Applicant's Decommissioning Cost Estimate - Methods and Assumptions

The applicant's retirement cost estimate includes the removal of wind turbines, pad transformers, met towers, solar arrays, battery energy storage system components, collector substations, O&M Building, fencing, and aboveground collector and transmission lines; excavation of foundations and underground collector lines down to a depth of 3 feet; and return of soils to preconstruction grade, including the removal and restoration of roadways for the facility. The methods and assumptions used to estimate the site restoration costs are described in ASC Exhibit W Section 5.0, and include the following methods and assumptions:

- Labor costs are based on U.S. Department of Labor wage determinations and rates published by RS Means. Rates include base wage, fringe, and payroll tax liability, as well as an estimated 10 hours per week at overtime rates.
- Equipment rates are based on RS Means and historical vendor quotes and include fuel and maintenance. Rental equipment, which is typically more expensive than contractor-owned equipment, is assumed.
- Mobilization and demobilization costs were estimated to reflect the cost of equipment and crew mobilization. Temporary facilities would be placed on site to include office trailer, storage units, port a toilet, first aid supplies, and utilities.

- Restoration includes labor, equipment, and production rates required for each individual task.
- For purposes of estimating costs, it is assumed that roads would be decompacted and reseeded to match the surrounding area and in such a way that they are no longer usable as a road. At the time of facility retirement, the landowner may elect to leave some roads in place, which would be a reduction to the estimated cost.
- Home Office, Project Management, Overhead, and Fees can vary significantly by contractor. This estimate includes average costs as a percentage of total cost and consists of 5 percent for Home Office and Project Management, and 13 percent for Overhead and Fees. Contractor Contingency in the amount of 3 percent of total cost also is included.²⁰²
- Miscellaneous costs such as permits, engineering, signage, fencing, traffic control, utility disconnects, etc. are included as incidental costs.

The facility decommissioning estimate was developed by Tetra Tech. The Council has reviewed the applicant's methods, assumptions and data sources (e.g., prevailing labor rates, and facility design of up to 112 General Electric 3.03-MW turbines along with up to 820,000 solar panels and related facilities) and finds that the information is reasonably accurate and consistent with decommissioning estimates approved by Council for other energy facilities. The amount totals \$31.5 million. This estimate is presented in Table 7: *Facility Decommissioning Tasks and Cost Estimate* below and includes Department corrections and adjustments (see footnotes and section below).

Table 7: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost (\$)	Unit	Estimate (\$)
Mobilization / Demobilization				
<i>Equipment Mob</i>	1	101,500.00	Lump Sum	\$101,500.00
<i>Site Facilities</i>	1	2,200.00	Lump Sum	\$2,200.00
<i>Crew Mob & Site Setup</i>	3	15,703.57	Day	\$47,110.71
<i>Crew Demob & Site Cleanup</i>	2	15,703.57	Day	\$31,407.14
<i>Mob-Erection Sub</i>	1	725,000.00	Lump Sum	\$725,000.00
<i>[1.2] Subtotal =</i>				\$907,217.85
Site Facilities	12	2,155.00	Month	\$25,860.00
Field Management	52	30,245.91	Week	\$1,572,787.32
Substation & Switchyard Removal				
<i>Fence Removal</i>	2	1,286.19	Day	\$2,572.38

²⁰² NHWAPPDoc2-22 ASC Exhibit W. Retirement_2022-01-31. Pages 11-25 of 49. The decommissioning estimate includes a line item for ODOE Management Fee (Pass Through Cost) for a lump sum amounting in \$533,000. The Council did not include this amount in Table 7: *Facility Decommissioning Tasks and Cost Estimate*, because the Council adds its own contingencies which are based on an adjusted total of the applicant's total costs and discussed further in this section.

Table 7: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost (\$)	Unit	Estimate (\$)
<i>Transformer & Switchyard Equip Removal</i>	2	129,881.96	Each	\$259,763.92
<i>Remove Control Building</i>	2	2,604.41	Each	\$5,208.82
<i>UG Utility & Ground Removal</i>	4	1,286.19	Day	\$5,144.76
<i>Remove Foundations to Subgrade</i>	784	34.84	Cubic Yd.	\$27,314.56
<i>Misc. Material Disposal</i>	2	1,675.00	Each	\$3,350.00
<i>Restore Yard</i>	2	17,159.73	Each	\$34,319.46
<i>Subtotal =</i>				\$337,673.90
Construct & Remove Temporary Crane Pads				
<i>Crane Pad 4" Stone 8" depth</i>	11,200.00	34.9	Ton	\$390,880.00
<i>Crane Pad 2" Stone 6" depth</i>	8,400.00	38.2	Ton	\$320,880.00
<i>Remove stone after erection</i>	112	1,238.61	Each	\$138,724.32
<i>Subtotal =</i>				\$850,484.32
Wind Turbine Generation Removal				
<i>Remove Top, Nacelle, Rotor</i>	112	20,000	Each	\$2,240,000.00
<i>Remove Base & Mid</i>	112	10,000	Each	\$1,120,000
<i>Subtotal =</i>				\$3,360,000.00
Wind Turbine Generation Sizing & Loadout				
<i>Oil Removal & Disposal</i>	112	262.13	Each	\$29,358.56
<i>Demo & Prepare for Shipment Offsite</i>	32,032.00	32.49	Ton	\$1,040,719.68
<i>Blade T&D</i>	4,256.00	95	Ton	\$404,320.00
<i>Scrap Trucking Cost</i>	32,032.00	65	Ton	\$2,082,080.00
<i>Subtotal =</i>				\$3,556,478.24
Wind Turbine Generation Foundation Removal				
<i>Remove Cylindrical Pedestal</i>	2,240.00	45.91	Cubic Yd.	\$102,838.40
<i>Remove Top 2' of Octagonal Base</i>	16,800.00	47.16	Cubic Yd.	\$792,288.00
<i>Concrete Transport Offsite</i>	19,040.00	11.96	Cubic Yd.	\$227,718.40
<i>Subtotal =</i>				\$1,122,844.80
Pad Mount Transformer Removal				
<i>Oil Removal & Disposal</i>	112	981.33	Each	\$109,908.96
<i>Remove & Loadout Transformer</i>	112	109.96	Each	\$12,315.52
<i>Scrap Trucking Cost</i>	896	65	Ton	\$58,240.00
<i>Remove Foundations to Subgrade</i>	112	34.84	Each	\$3,902.08
<i>Subtotal =</i>				\$184,366.56
MET Tower Removal				
<i>Structure Demo</i>	3	2,503.99	Each	\$7,511.97
<i>Remove Foundation</i>	45	47.16	Cubic Yd.	\$2,122.20

Table 7: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost (\$)	Unit	Estimate (\$)
<i>Concrete Transport Offsite</i>	45	11.96	Cubic Yd.	\$538.20
<i>Scrap Trucking Cost</i>	24	45	Ton	\$1,080.00
<i>Subtotal =</i>				\$11,252.37
Solar Array Removal				
<i>Fence Removal</i>	260	260.18	MW	\$67,646.80
<i>Inverter / Transformer Removal</i>	260	2,816.88	MW	\$732,388.80
<i>Remove Foundations to Subgrade</i>	260	1,313.24	MW	\$341,442.40
<i>Solar Panel Removal</i>	260	15,508.04	MW	\$4,032,090.40
<i>Solar Rack (Trackers) & Post Removal</i>	260	22,726.70	MW	\$5,908,942.00
<i>Subtotal =</i>				\$11,082,510.40
DC Storage System Removal				
<i>Battery Removal & Disposal</i>	120	2,655.68	MW	\$318,681.60
<i>Structure & Components Removal</i>	120	955.28	MW	\$114,633.60
<i>Remove Foundations to Subgrade ¹</i>	120	1,313.24	MW	\$157,588.80
<i>Subtotal =</i>				\$590,904.00
Collector Line Removal (OH, 34.5 KV)				
<i>Transmission Line – Wind</i>	1	114,361.97	Lump Sum	\$114,361.97
<i>Transmission Line – Solar</i>	1	69,125.21	Lump Sum	\$69,125.21
<i>Remove Wood Monopoles ²</i>	39	235.91	Each	\$9,200.49
<i>Subtotal =</i>				\$192,687.67
Transmission Line Removal (OH, 230 KV)				
<i>Conductor Removal</i>	32	7592.69	Mile	\$242,966.08
<i>Remove Wood Monopoles</i>	282	913.98	Each	\$257,742.36
<i>Subtotal =</i>				\$500,708.44
O&M Building Removal				
<i>Structure Demo</i>	40	250.4	Ton	\$10,016.00
<i>Remove Foundations to Subgrade</i>	320	34.84	Cubic Yd.	\$11,148.80
<i>Subtotal =</i>				\$21,164.80
Private Access Road Removal (New Roads)				
<i>Private Access Road Removal (New Roads) – Wind</i>	43	5,676.59	Mile	\$244,093.37
<i>Private Access Road Removal (New Roads) – Solar</i>	18	5,676.59	Mile	\$102,178.62
<i>Subtotal =</i>				\$346,271.99
Spot Grade Disturbed Areas – Solar Array	380	548.41	Acre	\$208,395.80
Re-Seed with Native Vegetation – Roads & Areas Disturbed by Construction				

Table 7: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost (\$)	Unit	Estimate (\$)
Re-Seed with Native Vegetation – Roads & Areas Disturbed by Construction – Wind	1	209,610.00	Lump Sum	\$209,610.00
Re-Seed with Native Vegetation – Roads & Areas Disturbed by Construction – Solar	1	306,765.00	Lump Sum	\$306,765.00
Subtotal =				\$516,375.00
Nolin Hills Wind Facility Max Potential Decommissioning Cost (Cost) Subtotal =				\$25,387,983.46
Decommissioning Subtotal for Wind and Solar (98% of Total Cost)				\$24,797,079.46
Decommissioning Total for Battery (BESS) (2% of Total Cost				\$590,904.00
Applicant Applied Contingencies				
Home Office, Project Management (5% Of Cost)	5		Percent	\$1,269,399.17
Contractor Contingency (3% Of Cost)	3		Percent	\$761,639.50
Contractor OH & Fee (13% Of Cost)	13		Percent	\$3,300,437.85
Applicant Contingency Subtotal =				\$5,331,476.53
Total Applicant Contingencies for Wind and Solar (98% of total contingencies)				\$5,224,847.00
Total Applicant Contingencies for Battery (BESS) (2% of total contingencies)				\$106,629.53
Subtotal of Cost and Applicant Contingencies (Q4 2020 Dollars) ³ - Rounded to nearest \$1				\$30,719,460
Total Applicant Contingencies for Wind and Solar (98% of total contingencies)				\$30,021,926
Total Applicant Contingencies for Battery (BESS) (2% of total contingencies)				\$697,534
Subtotal of Cost and Applicant Contingencies (Q1 2022 Dollars) ⁴				\$32,654,785.97
Performance Bond	1	Percent		\$326,547.86
Adjusted Gross Cost				\$32,981,333.83
Department Applied Contingencies				
Department Administration and Project Management	10		Percent	\$3,298,133.38
Future Development Contingency	10		percent	\$3,232,170.71
	20 (BESS)		percent	\$131,925.34
	subtotal			\$3,364,096.05
ODOE Contingency Subtotal =				\$6,662,229.43
Total Site Restoration Cost with Department Adjusted Contingencies (Q1 2022 Dollars) Rounded to nearest \$1				\$39,643,563

Table 7: Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit Cost (\$)	Unit	Estimate (\$)
<p>Notes:</p> <ol style="list-style-type: none"> 1. Department added line item to address the removal of the foundations for the BESS. Department used the unit costs (1,313.24/MW), from solar inverter/transformer foundation removal. 2. ASC Exhibit W Attachment W-1, line item 1.14.1.2 identifies 192 wooden poles for the wind collector line and line item 1.14.2.2 identifies the removal of 116 wooden poles, this line item combines the total for 308 wooden poles removed. ASC Exhibit G identifies a tot of 347 wooden poles; therefore, the remaining 39 poles is added as this line item. 3. All unit costs are in Q4 2020 Dollars. 4. Adjustment factor from Q4 2020 Dollars to Q1 2022 Dollars is 1.063. <p>Source: See NHWAPPDoc2-22 ASC Exhibit W. Retirement_2022-01-31, Attachment W-1 for detailed breakdown of tasks, actions and unit costs for the sum total costs presented in this table.</p>				

As presented in Table 7: *Facility Decommissioning Tasks and Cost Estimate*, the Council adds a 10 percent contingency cost for both the administrative and project management expenses, and a future development contingency (less the decommissioning estimate of the BESS/DC Storage System, which the Council finds to have a 20 percent contingency be applied). A performance bond of 1 percent is also to be applied. For all types of energy facilities, the subtotal of line-item costs, including contractor's overhead, profit and insurance costs, and specialty contract costs is increased by one percent to account for the cost of a performance bond that would be posted by the contractor as assurance that the work would be completed as agreed, if the facility needs to be retired absent the applicant.

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

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

Therefore, the Council finds that \$39 million (Q1 2022 dollars) is a reasonable estimate of an amount satisfactory to restore the site to a useful, nonhazardous condition.

1 Alternative requests made by the applicant include Council consideration of a reduced
2 decommissioning amount based on the value of scrap and different contingencies for the
3 Department's project management costs, if it were required to manage decommissioning on
4 the applicant's behalf. These facts are presented in ASC Exhibit W. These requests have been
5 made by previous applicants where Council has consistently taken the policy position that such
6 requests be dealt with via rulemaking.²⁰³ Therefore, these facts are not relied upon by Council
7 and are omitted from this section.

8 9 *Ability of the Applicant to Obtain a Bond or Letter of Credit*

10
11 Royal Bank of Canada (RBC) issued a letter on March 2, 2022 stating that "Capital Power US
12 Holdings Inc. (CPUSHI) is a valued client of Royal Bank of Canada...[and that it's their]
13 understanding that CPUSHI (as parent of the Applicant, Nolin Hills Wind LLC) may be asked to
14 provide a letter of credit and that the potential liability of the letter of credit could total an
15 amount of up to thirty-nine million dollars (\$39,000,000.00)." Furthermore, the letter clarifies
16 that RBC "has an ongoing relationship with CPUSHI which includes providing credit facilities and
17 from time to time, issuing letters of credit. As of today [(3/2/2022)], CPUSHI has sufficient
18 capacity on its credit facility to issue the letter of credit." RBC has been evaluated by Council
19 and is included on the 2022 pre-approved financial institution list.²⁰⁴

20
21 An Opinion of Senior Legal Counsel of Capital Power Corporation, dated October 13, 2020
22 indicates that the applicant has the legal authority to construct and operate the facility, without
23 violating its articles of incorporation covenants, or similar agreements.

24
25 Based on review of the legal opinion and financial assurance letter, which are largely consistent
26 with similar letters historically reviewed by Council under the standard, the Council finds that
27 the applicant has demonstrated a reasonable ability to obtain a bond or letter of credit in a
28 form and amount be considered satisfactory by Council.

29
30 OAR 345-025-0006(8) establishes a mandatory condition that must be imposed in all site
31 certificates.

32
33 Before beginning construction of the facility, the certificate holder must submit to the
34 State of Oregon, through the Council, a bond or letter of credit in a form and amount
35 satisfactory to the Council to restore the site to a useful, non-hazardous condition. The
36 certificate holder must maintain a bond or letter of credit in effect at all times until the
37 facility has been retired. The Council may specify different amounts for the bond or
38 letter of credit during construction and during operation of the facility.

²⁰³ BSPAPDoc2 Final Order 2020-04-24, Section IV.G. *Retirement and Financial Assurance* and OSCAPDoc2 Final Order on ASC 2022-02-25, Section IV.G. *Retirement and Financial Assurance*.

²⁰⁴ NHWAPDoc2-30 ASC Additional Information Package Exhbs B, M, O, J, U, DD 2022-03-04.

1
2 This condition is imposed, based on the decommissioning amount required by the by Council,
3 per below:
4

5 **Retirement and Financial Assurance Condition 4 (PRE):** Before beginning construction
6 of the facility or a facility component, the certificate holder shall submit to the State of
7 Oregon, through the Council, a bond or letter of credit naming the State of Oregon,
8 acting by and through the Council, as beneficiary or payee. The total bond or letter of
9 credit amount for the facility is \$39.643 million dollars (Q1 2022 dollars), to be adjusted
10 to the effective date, and adjusted on an annual basis thereafter, as described in sub-
11 paragraph (b) of this condition:

- 12 a. The certificate holder may adjust the amount of the bond or letter of credit based
13 on the design configuration of the facility, or any phase of the facility, by applying
14 the unit costs presented in Table 7 of the Final Order on the ASC, and the
15 contingencies illustrated in Table 7 of the Final Order on the ASC and may further
16 make adjustments based on unit costs for task and actions presented in ASC Exhibit
17 W Attachment W-1 and W-2. Any revision to the restoration costs should be
18 adjusted to the effective date as described in (b). Any modification to the unit costs
19 presented in Table 7 of the Final Order on the ASC are subject to review and
20 approval by the Council.
- 21 b. The certificate holder shall adjust the amount of the bond or letter of credit using
22 the following calculation:
- 23 i. Adjust the amount of the bond or letter of credit (expressed in Q1 2022
24 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price
25 Deflator, Chain Weight, as published in the Oregon Department of
26 Administrative Services' "Oregon Economic and Revenue Forecast" or by any
27 successor agency and using the first quarter 2022 index value and the quarterly
28 index value for the date of issuance of the new bond or letter of credit. If at
29 any time the index is no longer published, the Council shall select a comparable
30 calculation to adjust first quarter 2022 dollars to present value.
- 31 ii. Round the result total to the nearest \$1,000 to determine the financial
32 assurance amount.
- 33 c. The certificate holder shall use an issuer of the bond or letter of credit and a bond or
34 letter of credit form approved by the Council, based on the Council's pre-approved
35 financial institution list and form.

36 [PRE-RT-01, Mandatory Condition OAR 345-025-0006(8)]
37

38 **Conclusions of Law**

39

40 Based on the foregoing findings of fact, and subject to compliance with the site certificate
41 conditions, the Council finds that the applicant would comply with the Council's Retirement and
42 Financial Assurance standard.

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

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

Findings of Fact

As established in the Amended Project Order, the fish and wildlife habitat analysis area includes the area within and extending 0.5-miles from the proposed site boundary. Information related to fish and wildlife habitat within the analysis area is provided in ASC Exhibit P.

IV.H.1. Department Evaluation of Applicant's Desktop and Field Surveys

Literature review and field studies were conducted, based on consultation with the Department, ODFW and U.S. Fish and Wildlife Service (USFWS), to inform the evaluation for the Council's Fish and Wildlife Habitat standard. Records of agency consultation are provided in ASC Exhibit P Attachment P-1, and Attachment B of this order.²⁰⁵

Sources of literature evaluated include:

- Oregon Biodiversity Information Center's 2017 and 2019 Element Occurrence Record Digital Data Set for rare, threatened or endangered species for the state of Oregon
- Csuti's 2001 Atlas of Oregon wildlife, 2nd edition
- Marshall's 2003 Birds of Oregon: a general reference
- NatureServe's 2017 A online encyclopedia of life
- ODFW's 2016 and 2019 Sensitive Species List
- StreamNet's 2018 Fish distribution and critical habitat map data for Oregon
- Historic raptor nest survey reports from the 2009 Montague Wind Power Facility ASC
- Eagle nest surveys results form 2017-2019 from Oregon Eagle Foundation
- SWCA Environmental Consultant's 2010 Critical Issues Analysis, Cunningham Wind Resource Area
- Western Bat Working Group's 2020 Western Bat Species profiles
- USFWS's 2012 Land-Based Wind Energy Guidelines

Numerous wildlife, habitat and botanical surveys were conducted from 2017 through 2020 to inform the evaluation under the standard, which are summarized below:

- Washington ground squirrel surveys

²⁰⁵ NHWAPDoc2-15 ASC Exhibit P. Fish and Wildlife_2022-01-31. ASC Exhibit P Attachment P-1 includes records of 14 separate consultation inquiries between applicant and ORBIC, ODFW, NOAA Fisheries, USFWS and the Department between 2017 through 2020. NHWAPDoc2-15 ASC Exhibit P Fish and Wildlife 2022-01-31.

- 1 • Eagle nest surveys
- 2 • Raptor nest surveys
- 3 • Eagle use surveys
- 4 • Avian use surveys
- 5 • Pedestrian wildlife surveys
- 6 • Habitat categorization surveys
- 7 • Bat surveys
- 8 • Botanical surveys
- 9

10 The survey timing and area covered is presented in Table 8: *Fish and Wildlife Habitat Survey*
 11 *Summary* below and will be used to inform whether additional preconstruction surveys would
 12 be needed, based on unsurveyed areas, modified protocol or need for preconstruction
 13 validation of current conditions given potential for change due to species characteristics.

Table 8: Fish and Wildlife Habitat Survey Summary

Survey Type	Years Conducted	Acreage Covered (Entirety of suitable habitat within micrositing corridor, yes or no?)	Preconstruction Surveys Required?
Washington ground squirrel/wildlife surveys	2017-2020	27,760 acres; no, not all areas surveyed	Yes
Habitat categorization surveys	2017-2020	~48,159 acres, using 1-acre mapping units; no, not all areas surveyed	Yes
Botanical surveys	2017-2020	4,466 acres; no, not all areas surveyed	Yes ¹
Eagle nest surveys	2011, 2017-2018	10-mile buffer of site boundary; yes, covered all area	No
Raptor nest surveys	2011, 2017-2019	2-mile buffer of site boundary; yes, covered all area	Yes
Avian use surveys	2010, 2017-2018	16 800-meter radius plots distributed throughout turbine string area; yes, covered all area	No
Eagle use surveys	2017-2019	24 800-meter radius plots distributed throughout turbine string area; yes, covered all area	No
Wetlands and waters survey	2017-2020	14,928 acres surveyed; no, not all areas surveyed	Yes ²
Bat acoustic surveys	2017	3 ground-based bat detectors throughout site boundary; yes, covered reasonable area	No
Notes:			
1. Preconstruction botanical surveys within suitable habitat for rare plants are required under the Threatened and Endangered Species standard and could be used to inform preconstruction noxious weed infestation locations and vegetation characteristics of monitoring and reference locations to then be used to inform the revegetation plan.			

Table 8: Fish and Wildlife Habitat Survey Summary

Survey Type	Years Conducted	Acreage Covered (Entirety of suitable habitat within micrositing corridor, yes or no?)	Preconstruction Surveys Required?
2. Preconstruction wetlands/waters of the state survey are required within unsurveyed areas under Removal Fill Law and will be used to inform final habitat mapping.			

The surveys summarized in the above table were based on protocols reviewed by ODFW, ODA, DSL and the Department. Survey protocols and survey reports are provided in ASC Exhibit P Attachment P-1. Based on evidence of consultation on survey protocols included in ASC Exhibit P, the Council finds that the surveys adequately inform the evaluation of potential impacts to State-sensitive species and habitat categorization.

Habitat Categories within the Analysis Area

This standard creates requirements for mitigating impacts to fish and wildlife habitat, based on the functional quantity and quality of the habitat impacted as well as the nature, extent, and duration of the impact. Functional quality is presented using a habitat classification system based on the function and value of the habitat it would provide to a species or group of species likely to use it. ODFW policy identifies six habitat categories, with Category 1 being the most valuable, and Category 6 the least valuable.

“Habitat Category 1” is irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or 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 a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.

If impacts are unavoidable, the mitigation goal for Category 2 habitat is no net loss of either habitat quantity or quality and provision of a net benefit of habitat quantity or quality. The Council interprets this to mean that both habitat quantity and quality must be preserved and both habitat quantity and habitat quality must be improved. To achieve this goal, impacts must be avoided or unavoidable impacts must be mitigated through reliable “in-kind, in-proximity” habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity and quality must be provided.

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

4
5 The mitigation goal for Category 3 habitat is no net loss of either habitat quantity or quality.
6 The Council interprets this to mean that both habitat quantity and quality must be preserved.
7 The goal is achieved by avoidance of impacts or by mitigation of unavoidable impacts through
8 reliable “in-kind, in-proximity” habitat mitigation to achieve no net loss in either pre-
9 development habitat quantity or quality.

10
11 *“Habitat Category 4” is important habitat for fish and wildlife species.*

12
13 Like Category 3, the mitigation goal for Category 4 habitat is no net loss in either existing
14 habitat quantity or quality. The Council interprets this to mean that both existing habitat
15 quantity and quality must be preserved. The goal is achieved by avoidance of impacts or by
16 mitigation of unavoidable impacts. In contrast to Category 3, mitigation options are less
17 constrained and may involve reliable “in-kind or out-of-kind, in-proximity or off-proximity”
18 habitat mitigation to achieve no net loss in either pre-development habitat quantity or quality.

19
20 *“Habitat Category 5” is habitat for fish and wildlife having high potential to become*
21 *either essential or important habitat.*

22
23 If impacts are unavoidable, the mitigation goal for Category 5 habitat is to provide a net benefit
24 in habitat quantity or quality. The Council has previously interpreted this to mean that there
25 must be some improvement in either habitat quality or quantity. To clarify the “net benefit”
26 goal, ODFW has advised: “The improvement in habitat quantity or quality achieved need not
27 rise to the level of improvement required to meet a goal of ‘no net loss’ (i.e., the level required
28 or recommended in the Mitigation Policy for Habitat Categories 2, 3, and 4).” The goal is
29 achieved by avoidance of impacts or by mitigation of unavoidable impacts through “actions that
30 contribute to essential or important habitat.”

31
32 *“Habitat Category 6” is habitat that has low potential to become essential or important*
33 *habitat for fish and wildlife.*

34
35 Impacts to Category 6 habitat does not require mitigation under the standard.

36
37 ASC Exhibit P Figures P-4 and P-5 present habitat mapping within the analysis area. Habitat
38 categorization, based on habitat type, within the analysis area includes the following:

- 39
40
 - Category 1 habitat: 785-feet from active Washington ground squirrel (WGS) colonies,

41 unless there is a habitat break; these areas apply to Eastside Grasslands, Shrub-Steppe,

Irrigated Pastures and Hay Meadows, and Planted Grasslands, including recently converted wheat fields.²⁰⁶

- Category 2 habitat:
 - 4,136 feet from Category 1 WGS habitat buffer, unless there is a habitat break
 - Mule deer winter range
 - Seasonal ponds with high quality, mostly native vegetation
 - Fish-bearing natural streams
 - Scrub-shrub wetlands
 - Eastside riparian
- Category 3 habitat:
 - Open water areas
 - Seasonal ponds
 - Fish bearing and non-fish bearing natural stream channels (marginal spawning or rearing habitat due to gravel present in pockets/30% embedded)
 - Emergent wetlands (mixture of native and non-native species)
 - Scrub-shrub wetlands (mixture of native and non-native species)
 - Forested wetlands (mixture of native and non-native species)
 - Eastside riparian
 - Eastside grasslands (moderate to highly disturbed, 15-75% native ground cover)
 - Shrub-steppe (moderate cover by weeds)
 - Planted grasslands²⁰⁷
 - Cliffs, caves and Talus (without bat colonies)
- Category 4 habitat:
 - Eastside riparian
 - Eastside grasslands (highly disturbed, 15-50% native ground cover)
 - Shrub-steppe (heavily degraded, weedy)
 - Planted grasslands²⁰⁸
- Category 5 habitat:
 - Seasonal ponds (almost completely dominated by non-native plant species)

²⁰⁶ Applicant excludes planted grasslands recently converted from wheat cultivation from its Category 1 and 2 habitats because they consider that this habitat type is not irreplaceable, essential or limited. This argument is inconsistent with ODFW's recommendation and prior Council action. The argument focuses solely on the quality of planted grassland and ignores the "essential" quality of area surrounding an active colony, where the area is relied upon for WGS movement, which is essential for their life history and genetic interchange among colonies. Category 1 habitat shall be based on 785-feet from an active colony and Category 2 habitat shall be based on 4,136 feet from the delineated Category 1 habitat buffer, unless there is a documented habitat break, such as a road. See Final Order on Request for Amendment 1 of the Carty Generating Station Site Certificate. 2018-12-14.

²⁰⁷ Planted grasslands within 785-feet of an active WGS colony, or within 4,136 of the delineated Category 1 habitat buffers, are considered Category 2 habitat and shall not be included in this category.

²⁰⁸ Id.

- Intermittent or ephemeral streams
 - Farmed or previously filled wetlands
 - Eastside grasslands (highly disturbed, less than 15% native ground cover)
 - Shrub-steppe (low quality, dominated by non-native species)
 - Planted grasslands (highly disturbed, degraded)²⁰⁹
 - Irrigated pasture and hay meadows
- Category 6 habitat:
 - Active agriculture
 - Developed areas

The habitat categorization is based on habitat quality and function, informed through literature review, field surveys and ODFW input. These methods are appropriate for informing habitat categorization under ODFW's Fish and Wildlife Habitat Mitigation Policy. For these reasons, the Council finds that the habitat categorization may be relied upon to establish the applicable mitigation goals under the standard.

As described above, the analysis area includes the area within and extending 0.5-miles from the site boundary. Facility components will be located within a microsite area that represents substantially less area than the analysis area. The extent of the microsite area within the analysis area is presented in ASC Exhibit P Figure P-1. When an analysis area extends beyond the area that could be directly impacted, as is the case under the Fish and Wildlife Habitat standard, the purpose is to identify whether there are adjacent sensitive habitat areas, such as WGS Category 1 habitat, that would inform habitat categorization within the area of potential impact. Other than the potential for WGS habitat outside of the microsite area, there is not sensitive habitat outside the microsite area that should be considered in the evaluation of habitat categorization within the microsite area.

IV.H.2. Temporary Habitat Impacts and Mitigation

Facility construction and operations will result in temporary and temporal²¹⁰ habitat impacts. Construction-related temporary/temporal habitat disturbance impacts are estimated at 1,245 acres. This includes temporary impacts to 286 acres of Category 2, 264 acres of Category 3, 212 acres of Category 4, and 483 acres of Category 5, as presented in Table 9 below. Temporal impacts include 2 acres of Category 2, 2 acres of Category 3, 1 acre of Category 4 and 17 acres of Category 5 shrub-steppe habitat, which are also addressed in the evaluation of permanent habitat impacts.

²⁰⁹ Id.

²¹⁰ Temporal loss refers to loss of habitat function and values from the time an impact occurs to the time when the restored habitat provides a pre-impact level of habitat function. Habitat subtypes identified within the site boundary including shrub-steppe are reasonably expected to require a longer restoration timeframe (5+ years) and therefore would be expected to result in temporal loss requiring compensatory mitigation beyond revegetation.

Table 9: Temporary/Temporal Habitat Impacts from Facility Construction

Habitat Subtype	Habitat Category (acres)				
	2	3	4	5	6
Irrigated Pastures and Hay Meadows	1	-	-	1	-
Planted Grasslands	21	92	44	215	-
Cliffs, Caves and Talus	-	1	-	-	-
Intermittent or Ephemeral Streams	1	1	2	1	-
Permanent Ponds/Lakes	-	1	-	-	-
Perennial Streams	2	-	-	-	-
Eastside Riparian	1	-	1	-	-
Eastside Grasslands	258	167	164	249	-
Shrub-steppe ¹	2	2	1	17	-
Orchards, Vineyards, Wheat Fields, Other Row Crops	-	-	-	-	820
Urban and Mixed Environs	-	-	-	-	82
Total Estimated Temporary Impacts =	286	264	212	483	902
Total Estimated Temporary Impacts to Habitat Categories 1-5 =	1,245				
Notes: 1. Shrub-steppe is expected to require a longer restoration timeframe (5+ years) and therefore would require additional mitigation beyond revegetation to address the loss of habitat function and values during the restoration period, see Table 11: Summary of ODFW Mitigation Goals and Estimated Acreage for Mitigation.					

Facility operations could also result in additional temporary disturbance from vehicle and equipment use along the transmission right-of-way, where permanent roads have not been constructed, or during crane walking associated with wind turbine maintenance activities, that result in vegetation crushing or disturbance within Category 2 WGS habitat (redisturbance of up to 286 acres). Vehicle and equipment used during construction and operation could also result in spreading of noxious weeds.

To achieve the habitat mitigation goals for temporary impacts to Category 2, 3, 4 and 5 habitat, successful noxious weed control and revegetation within a 5-year timeframe are required. From 2017-2020, the applicant, ODFW and the Department developed a draft Revegetation and Noxious Weed Plan to demonstrate consistency with the applicable habitat mitigation goals for each category. This draft Revegetation and Noxious Weed Plan is included in Attachment P-2 of this order. Applicant representations and elements of the plan are described below:

- Applicant proposes to conduct preconstruction habitat and botanical surveys within potential ground disturbance areas to identify changes in habitat categorization; botanical surveys would also be used to identify presence of noxious weeds.

- These surveys would be used to inform final habitat categorization and weed infestation areas to be treated and/or avoided.
- Paired monitoring and reference sites for each habitat category, to be reviewed and approved by the Department in consultation with ODFW, will be selected and used to evaluate the success of revegetation.
- A vegetation monitoring procedure, reviewed and approved by the Department in consultation with ODFW, will be implemented to track the success of revegetation actions.
- Monitoring will be conducted annually, for 5-years, with results submitted to the Department and ODFW within 60-days of revegetation inspection.
- Revegetation success will be based on: vegetation density, relative proportion of desirable vegetation, species diversity of desirable vegetation, and presence and density of noxious weeds of the monitoring sites compared to reference sites.

The Council requires several revisions within the draft Revegetation and Noxious Weed Plan, including that the plan, as a draft plan, include a clear scope of the components to be finalized prior to construction²¹¹; and that, in order to support achievement of successful revegetation in wildlife habitat areas, that noxious weed control be implemented throughout the life of the facility. The Council imposes a condition requiring that, prior to construction, the applicant conduct habitat categorization surveys, and based on those surveys, submit to the Department and ODFW, a Revegetation and Noxious Weed Plan, substantially similar to the plan included in Attachment P-2 of this order, finalized based on the tasks listed in Section 3.1 of the plan:

Fish and Wildlife Condition 1 (PRE): Prior to construction, the certificate holder shall finalize and submit to the Department, for review and approval, the Revegetation and Noxious Weed Plan, as provided in Attachment P-2 of the Final Order on the ASC.
[PRE-FW-01]

Fish and Wildlife Condition 2 (CON): During construction, the certificate holder shall implement and adhere to the requirements of the final Revegetation and Noxious Weed Plan.
[CON-FW-01]

Fish and Wildlife Condition 3 (OPR): During operation, the certificate holder shall implement and adhere to the applicable requirements of the final Revegetation and Noxious Weed Plan.

²¹¹ The scope of plan finalization is presented in Section 3.1 of the plan and is based on preconstruction components as proposed by the applicant and Council. Components of plan finalization, as established by Council, include requiring that the preconstruction botanical or habitat surveys be designed to: evaluate noxious weeds; collect information to inform selection of monitoring and reference sites; and develop a reporting format to ensure that adequate information is collected to inform predisturbance baseline conditions and allow for long-term evaluation of the success criteria. The Council adopted several changes related to restoration of temporarily disturbed croplands, unrelated to the Fish and Wildlife Habitat standard which are addressed under the Land Use section of this order.

[OPR-FW-01]

Based on the evaluation of habitat, habitat categorization and applicable mitigation goals, and compliance with the above-proposed condition, the Council finds that the applicant has demonstrated that temporarily impacted wildlife habitat would be mitigated in a manner consistent with ODFW's fish and wildlife habitat mitigation policy.

IV.H.3. Permanent Habitat Impacts and Mitigation

Facility operations will result in permanent habitat impacts. Permanent habitat impacts are estimated at 181 acres. This would include permanent impacts to 15 acres of Category 2, 41 acres of Category 3, 46 acres of Category 4, and 79 acres of Category 5, as presented in Table 10 below.

Table 10: Permanent Habitat Impacts from Facility Construction

Habitat Subtype	Habitat Category (acres)				
	2	3	4	5	6
Irrigated Pastures and Hay Meadows	-	-	-	1	-
Planted Grasslands	2	8	4	63	-
Cliffs, Caves and Talus	-	-	-	-	-
Intermittent or Ephemeral Streams		1	1	-	-
Permanent Ponds/Lakes	-	-	-	-	-
Perennial Streams	1	-	-	-	-
Eastside Riparian	-	-	-	-	-
Eastside Grasslands	11	31	41	14	-
Shrub-steppe	1	1	-	1	-
Orchards, Vineyards, Wheat Fields, Other Row Crops	-	-	-	-	1,852
Urban and Mixed Environs	-	-	-	-	7
Total Estimated Permanent Impacts =	15	41	46	79	1,859
Total Estimated Permanent Impacts to Habitat Categories 2-5 =	181				

To achieve the habitat mitigation goals for permanent impacts to Category 2, 3, 4 and 5 habitats, the applicant proposes to implement a Habitat Mitigation Plan (HMP). In the Draft HMP (See Attachment P-1 of this order), the applicant proposes to demonstrate consistency with ODFW's mitigation goals for each applicable habitat category based on obtaining a habitat mitigation area (HMA) of sufficient size and quality to provide a no net loss in habitat quantity for the approximately 181 acres permanently impacted; and to implement a suite of enhancement actions sufficient to achieve a no net loss and net benefit, as applicable to Category 2 habitat, in habitat quality.

Table 11: Summary of ODFW Mitigation Goals and Estimated Acreage for Mitigation

Habitat Category	ODFW Mitigation Goal	Mitigation Ratio (Acres in HMA: Acres Impacted)	Estimated Mitigation Acreage*
2	No net Loss of habitat quantity or quality and to provide a net benefit of habitat quantity or quality	2:1	30
3	No Net Loss of habitat quantity or quality	1:1	41
4		1:1	46
5		0.1-0.5:1	40
Total Acreage =			179.3 ¹
Notes:			
1. As presented in Table 9: Temporary/Temporal Habitat Impacts from Facility Construction, there are approximately 23 acres of temporal impacts to shrub-steppe habitat. This total includes approximately 22.3 acres based on the same mitigation ratios presented in this table.			

2

3 Based on the applicant's proposed mitigation ratios per habitat category for permanent and
4 temporal habitat impacts, the maximum size of the HMA would be approximately 179 acres.
5 The enhancement actions proposed to achieve a no net loss in habitat quality for Categories 3,
6 4 and 5, and a net benefit in quality for Category 2 habitat impacts, include: shrub planting;
7 weed control; seeding; fire control; and restricted grazing.

8

9 Two potential HMAs have been identified: Olex Conservation Opportunity Area (COA) and Lone
10 COA. The Olex COA has 139 available acres, and the Lone COA has 105 available acres; totaling
11 244 available mitigation acres. The proposed enhancement of weed control, fire control and
12 restricted grazing would ensure a no net loss in habitat quality, but given the current habitat
13 quality, would not, on its own, provide a net benefit in habitat quality.

14

15 Based on landowner interview, within the Olex COA, 95 acres could benefit from shrub planting
16 and seeding; and 70 acres within the Lone HMA could benefit from shrub-planting and seeding.
17 This level of available enhancement was reviewed by the Department, in consultation with
18 ODFW, and was determined to demonstrate an ability to achieve a net benefit in habitat
19 quality, consistent with the mitigation goal for Category 2 habitat. Based on the combined size
20 of the proposed potential HMAs and enhancement potential, the Council finds that the
21 applicant has provided sufficient evidence to make findings of compliance under the standard.

22

23 The Council imposes the following conditions requiring that, prior to construction, the applicant
24 finalize the Draft Habitat Mitigation Plan, including selection of an HMA, substantially similar to
25 or with similar habitat enhancement potential as that currently under review, based on a
26 preconstruction habitat assessment, and execution of a legally binding agreement to conserve,
27 enhance and maintain the HMA for the life of the facility:

28

29 **Fish and Wildlife Condition 4 (PRE):** Prior to construction, the certificate holder shall:

- a. Calculate the size of the habitat mitigation area (HMA) for permanent and temporal habitat impacts, based on final facility design. The calculation must be based on the ratios and methods presented in the Final Order on the ASC and provided to the Department for review and approval.
- b. Provide evidence to the Department demonstrating that an agreement of outright purchase, conservation easement or similar conveyance has been executed for the enhancement and protection of the HMA under the requirements of the Habitat Mitigation Plan, to extend for the life of the facility.
- c. Submit a final Habitat Mitigation Plan to the Department for review and approval, substantially similar to the draft plan provided in Attachment P-1 of the Final Order on the ASC.

[PRE-FW-02]

Fish and Wildlife Condition 5 (OPR): During operation, the certificate holder shall implement and adhere to the requirements of the Habitat Mitigation Plan, as approved per Fish and Wildlife Condition 4.

[OPR-FW-02]

Based on the evaluation of habitat, habitat categorization and applicable mitigation goals, and compliance with the above-proposed conditions, the Council finds that the applicant has demonstrated that permanent and temporally impacted wildlife habitat will be mitigated in a manner consistent with ODFW's fish and wildlife habitat mitigation policy.

IV.H.4. Wildlife Impacts and Mitigation

The site boundary contains suitable habitat for 24 state sensitive species (birds, mammals, reptiles and fish) and two eagle species.²¹² Potential impacts to state-sensitive species from facility construction include injury to or loss (fatality) due to collision with or crushing from construction equipment vehicles; and, general disturbance (noise and visual), which can interrupt wildlife behavior. In addition, there are risks to wildlife species during facility operations from turbine collision, potential nesting and breeding disturbance, electrocution, powerline collision, structure collision, vehicle collisions, disturbance related to artificial lighting and introduction or spread of noxious weeds. To minimize impacts to wildlife species, the applicant proposes to implement numerous design measures, construction restrictions and a long-term wildlife monitoring plan. Some of these design measures and construction restrictions include:

- Avoiding Category 1 habitat
- Avoiding Category 2 habitat impacts to the maximum extent feasible

²¹² NHWAPDoc2-15 ASC Exhibit P Fish and Wildlife 2022-01-31. Pages 25-33 of 619. The applicant clarifies in Exhibit P that while the two eagle species identified are not state sensitive species, "bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are ... species of concern protected under the Bald and Golden Eagle Protection Act (BGEPA)."

- Designing transmission lines in accordance with APLIC recommendations
- Implementing setbacks from ground-disturbing activities to active raptor nests during the sensitive nesting and breeding seasons
- Implementing a 200-meter setback from facility infrastructure to Alkali Canyon and a 140-foot setback from contour lines containing topographical high points and distinct canyon edges identified as areas with high raptor use
- Utilizing construction monitors to ensure avoidance of raptor nest buffers, WGS habitat, and wetlands
- Eliminating use of a Mud Springs Road as a transportation route due to its proximity to active raptor nests
- Implementing an onsite speed limit to reduce potential for wildlife-vehicle collision

All of the applicant's proposed measures are presented in ASC Exhibit P Section 7.1.1 and 7.1.2, which have been converted into measures that can be verified by the Department and included in a Wildlife Monitoring and Adaptive Management Plan provided as Attachment P-4 of this order. To ensure that the applicant adheres to its representations and to allow the Department the ability to monitor and evaluate implementation of the design and construction-related avoidance measures, the Council imposes the following conditions:

Fish and Wildlife Condition 6 (PRE): Prior to construction, the certificate holder shall provide evidence to the Department that the design measures included in the Wildlife Monitoring and Adaptive Management Plan have been included in the final facility design and construction contractor contracts, as applicable.
[PRE-FW-03]

Fish and Wildlife Condition 7 (CON): During construction, the certificate holder shall adhere to the requirements of the Wildlife Monitoring and Adaptive Management Plan. Monitoring records shall be maintained throughout construction and included in the semi-annual report submitted to the Department pursuant to OAR 345-026-0080.
[CON-FW-02]

During facility operation, the applicant proposes to adhere to the requirements of a Wildlife Monitoring Plan (WMP), as provided in Attachment P-3 of this order. The WMP predominately identifies long-term monitoring applicable to proposed wind facility components, including a 2-year post construction bird and bat fatality monitoring program; long term raptor nest surveys; and long-term WGS surveys. The WMP also include an injured wildlife handling and reporting program, which would apply to the facility regardless of final technology (wind, solar or both).

The fatality monitoring program will inform the estimated number of bird and bat fatalities attributable to wind facility components. After completion of the first and second year of monitoring, the applicant would provide the Department and ODFW a report containing annual fatality rate estimates based on the raw data collected. The reporting requirement for the

1 second year of monitoring would be comprehensive, including analysis of both monitoring
2 years (individually and combined), and a comparison to other wind energy facilities in the
3 region. If the applicant's reporting indicates fatality rates for either year of monitoring exceed
4 thresholds of concern, or the range of fatality rates found at the other wind energy facilities
5 evaluated within the region, the applicant would be required to consult the Department and
6 ODFW on additional mitigation, and commitment to performing an additional year of fatality
7 monitoring in the fifth year of operation. Furthermore, if the Department determines that
8 mitigation is needed, the applicant will propose appropriate mitigation actions approved by the
9 Department, to then be reviewed by Council.

10
11 The short-term raptor nest surveying described in the draft WMP would commence the first full
12 raptor nesting season following facility operation. The raptor nest surveying will require the
13 applicant to quantify raptor nests on the ground or aboveground in the vicinity of the facility
14 and determine whether facility operation noticeably impacts localized nesting activity or
15 nesting success of the Swainson's hawk, golden eagle, and ferruginous hawk populations. The
16 raptor nest surveying will require the applicant to quantify raptor nests on the ground or
17 aboveground in the vicinity of the wind facility components and determine whether facility
18 operation noticeably impacts localized nesting activity or nesting success of the Swainson's
19 hawk, golden eagle, and ferruginous hawk populations. Short-term monitoring would be
20 conducted in two monitoring seasons, each season requiring monitoring reports be provided to
21 the Department as described in Section 6 of the draft WMP. The applicant commits to
22 conducting long-term raptor nest surveys for the life of the facility, beginning in years divisible
23 by 5 following the second short-term monitoring season.

24
25 The WMP also represents monitoring and reporting measures for post-construction WGS
26 surveys, to be conducted every 5-years for the life of the facility. The results of the surveys
27 would be used to inform potential avoidance areas during facility O&M activities that result in
28 ground disturbance (see Threatened and Endangered Species Condition 2).

29
30 To ensure the applicant abides by the elements and representations of the WMP provided as
31 Attachment P-3 of this order, the Council imposes the following condition:

32
33 **Fish and Wildlife Condition 8 (OPR):** During operation, the certificate holder shall
34 implement and adhere to the Wildlife Monitoring Plan, as provided in Attachment P-3 of
35 this order.

36 [OPR-FW-03]
37

1 **Conclusions of Law**

2
3 Based on the foregoing findings of fact and conclusions, and subject to compliance with the site
4 certificate conditions, the Council finds that facility complies with the Council's Fish and Wildlife
5 Habitat standard.

6 **IV.I. Threatened and Endangered Species: OAR 345-022-0070**

7
8 *To issue a site certificate, the Council, after consultation with appropriate state agencies,*
9 *must find that:*

10
11 *(1) For plant species that the Oregon Department of Agriculture has listed as*
12 *threatened or endangered under ORS 564.105(2), the design, construction and*
13 *operation of the proposed facility, taking into account mitigation:*

14
15 *(a) Are consistent with the protection and conservation program, if any, that the*
16 *Oregon Department of Agriculture has adopted under ORS 564.105(3); or*

17
18 *(b) If the Oregon Department of Agriculture has not adopted a protection and*
19 *conservation program, are not likely to cause a significant reduction in the*
20 *likelihood of survival or recovery of the species; and*

21
22 *(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as*
23 *threatened or endangered under ORS 496.172(2), the design, construction and*
24 *operation of the proposed facility, taking into account mitigation, are not likely to*
25 *cause a significant reduction in the likelihood of survival or recovery of the species.*
26

27 **Findings of Fact**

28 The analysis area for threatened or endangered plant and wildlife species is established in the
29 Amended Project Order as the area within and extending five miles from the site boundary,
30 except for the proposed 230 kV transmission lines, where the analysis area is the area within
31 the site boundary.

32
33 **IV.I.1. Evaluation of Applicant's Methodology**

34
35 To evaluate the potential for state-listed T&E plant and wildlife species to occur within the
36 analysis area, agency consultation, literature review and field surveys were conducted. Agency
37 consultation occurred in 2017 through 2020 between the Department and Oregon Department
38 of Agriculture (ODA); and between the applicant, Oregon Department of Fish and Wildlife
39 (ODFW) and United States Fish and Wildlife Service (USFWS). Evidence of agency consultation
40 between the applicant, ODFW and USFWS is provided in ASC Exhibit P Attachment P-1 and
41 Attachment B of this order (see ODA comments, April 2020). Evidence of agency consultation
42 between the Department and ODA, and the Department and ODFW is provided in Attachment
43 B of this order.

1
2 The literature review evaluated the following sources and databases:

- 3 • 2001 United States Geologic Survey (USGS) National Hydrology Dataset
- 4 • 2011 USGS Northwest Regional Gap Analysis Project data, National Land Cover data
- 5 • 2011 Field Guide to Rare Plants of Washington from Washington Department of Natural
6 Resources
- 7 • 2017 United States Fish and Wildlife Service (USFWS) National Wetland Inventory
- 8 • 2017 Species information, maps and GIS data queries from USFWS
- 9 • 2017, 2019 Rare Plant Guide - Oregon Flora Project, Oregon State University
- 10 • 2017 and 2019 Fish distribution and critical habitat map data from StreamNet
- 11 • 2017 Species information, maps and GIS data from National Oceanic Atmospheric
12 Administration (NOAA) Fisheries
- 13 • 2017 and 2019 Element Occurrence Record Digital Data Set for rare, threatened or
14 endangered species for the state of Oregon from Oregon Biodiversity Information
15 Center (ORBIC)
- 16 • 2017, 2019 Species maps and GIS data from Oregon Department of Fish and Wildlife
17 (ODFW)
- 18 • 2017 Species Information from Oregon Department of Agriculture's Plant Conservation
19 Website
- 20 • 2017 aerial photography using Esri
- 21 • 2019 Herbarium and Image Collection from the Burke Museum of Natural History and
22 Culture, University of Washington.

23 The literature review of ORBIC identified four state-listed T&E species, two mammal and two
24 vascular plants, as having the potential to occur within the analysis area: Washington ground
25 squirrel (WGS), Wolverine, Lawrence's milkvetch and Northern wormwood. Based on specific
26 review of the habitat within the analysis area and suitable habitat of these species, Wolverine
27 and Northern wormwood were determined not to be likely to occur within the analysis area.
28 Therefore, this section addresses WGS and Lawrence's milkvetch.

29
30 Field surveys were conducted for WGS and rare plants, including state-listed T&E and candidate
31 plant species. Because candidate species are not covered under the standard, this section
32 evaluates the methods and results for the state-listed T&E plant species, Lawrence's milkvetch.

33 IV.I.2. Impacts and Mitigation to State-listed T&E Species

34 35 Washington Ground Squirrel

36
37 Surveys within suitable WGS habitat were conducted from 2017-2020. Based on these surveys,
38 there are approximately 9,165 acres of suitable WGS habitat within the wind portion of the
39 15,726 microsite area; there is suitable WGS habitat within 1,000 feet of the proposed solar

1 microsites corridor.²¹³ During the field surveys conducted to inform the ASC, twenty-nine active
2 WGS colonies covering approximately 50 acres were identified. ODFW considers the extent of
3 irreplaceable, essential WGS habitat (Category 1 habitat) to extend 785-feet from active
4 colonies, and the extent of habitat used by the species for dispersal and foraging (Category 2
5 habitat) to extent another 4,136 feet from the edge of the 785-foot buffer.²¹⁴ Impacts to
6 irreplaceable, essential habitat (Category 1 habitat) are precluded under the Council's Fish and
7 Wildlife Habitat standard (see Section IV.H. *Fish and Wildlife Habitat* of this order). The
8 applicant commits to avoiding any physical, direct impacts to Category 1 habitat, and mitigating
9 temporary and permanent impacts to Category 2 habitat, where the Category 2 mitigation goal
10 would apply to acres extending 4,136 feet from the delineated Category 1 habitat.

11
12 Based on WGS dispersal patterns, ODFW acknowledges results of WGS surveys for a 3-year
13 period. While the 2017-2020 survey data may be relied upon for this evaluation,
14 preconstruction surveys are necessary to ensure the impacts of the final facility are consistent
15 with the impacts currently under review. Preconstruction protocol-level surveys covering
16 suitable habitat within 1,000 feet of ground disturbing activities, including areas extending from
17 colonies into lands enrolled in Conservation Reserve Program, are necessary to verify WGS
18 colonies and habitat and to ensure avoidance and minimize impacts to the survivability of the
19 species. The Council imposes the following preconstruction condition to ensure that WGS
20 species and their habitat are avoided based on final design and protocol level surveys not older
21 than 3-years from the date of construction:

22
23 **Threatened and Endangered Species Condition 1 (PRE):** Prior to construction of facility
24 components, the certificate holder shall:

- 25 a. Submit a protocol-level survey plan for surveys to be conducted within suitable
26 habitat for Washington ground squirrel (WGS), for review and approval by the
27 Department in consultation with ODFW. At a minimum, the survey plan shall specify
28 the survey area (all areas of suitable habitat within 1,000 feet of ground disturbing
29 activities except where there is a habitat barrier (e.g., a paved road)); survey timing
30 (February 15 to May 31, unless otherwise approved by ODFW); and, land access
31 restrictions and any justification for modified survey methods.
- 32 b. Complete protocol-level WGS surveys based on the protocol approved per (a).
- 33 c. Submit survey reports to the Department and ODFW. The certificate holder shall not
34 begin construction within 1,000 feet of Category 1 or Category 2 WGS habitat until
35 the identified boundaries of Category 1 WGS habitat have been approved by the
36 Department, in consultation with ODFW. Category 1 habitat includes a 785-foot
37 buffer from an identified active burrow, and also the area within the perimeter of
38 multiple active burrows. Category 2 WGS habitat consists of a 4,136 foot buffer from

²¹³ NHWAPDoc2-15 ASC Exhibit P. Fish and Wildlife_2022-01-31. Pages 202-530 of 619, Attachment P-2, 2020 Washington Ground Squirrel Survey Report, Figures 1 and 2.

²¹⁴ Consultation between ODOE and ODFW affirmed ODFW's recommendation on the 875-foot buffer distance considered irreplaceable, essential WGS habitat, where impacts must be avoided, and Category 2, where habitat impacts may be mitigated in accordance with the Category 2 mitigation goal. NHWAPDoc5-2 ASC Reviewing Agency Comment ODFW_Rimbach_2022-02-18.

the exterior boundary of all Category 1 WGS habitat. The survey results are valid for 3-years.

- d. Develop maps and worker training materials to inform of sensitive Category 1 and Category 2 habitat. Submit to the Department final facility design maps demonstrating that Category 1 habitat, including 785-buffer from any colonies identified per (b), is avoided.
 - e. Install flagging or other demarcation, as appropriate, to inform workers of sensitive WGS habitat and of avoidance requirement.
- [PRE-TE-01]

Applicant commits to monitoring previously identified burrows and flagging during construction. These measures would support minimizing direct impacts during construction and are therefore to be imposed by Council in the following condition in the site certificate:

Threatened and Endangered Species Condition 2 (CON): In years 1, 2 or 3 following the preconstruction protocol-level WGS surveys, in areas of ground disturbance within 1,000-feet of previously identified WGS colonies, the certificate holder shall:

- a. Install and monitor flagging/temporary fencing to ensure avoidance of sensitive WGS habitat.
- b. Perform WGS surveys (non-protocol, spot check) and update maps and flagging. Provide updated maps to the Department and ODFW and identify any significant change in previously identified WGS habitat.

[CON-TE-01]

The applicant commits to conducting long-term WGS surveys following construction, every 5-years for the life of the facility. To ensure that the long-term WGS survey data is utilized to inform work area restrictions within suitable WGS habitat and minimize potential direct impacts to the species, the Council imposes the following condition:

Threatened and Endangered Species Condition 3 (OPR): During operation and maintenance, results of the most recent survey year of the long-term WGS monitoring conducted under the Wildlife Monitoring Plan (Attachment P-3 of this Final Order on the ASC), must be used to inform work area restrictions (785-foot avoidance buffer) within 1,000-feet of suitable WGS habitat.

[OPR-TE-01]

Potential indirect impacts to WGS include mortality from vehicle and equipment collision; temporary and permanent loss and modification of unoccupied habitat resulting in decreased cover, food availability and dispersal opportunities; habitat fragmentation from siting of the solar facility components; and, increased predation from perching opportunities afforded via the new transmission lines. Applicant represents measures to minimize these impacts including adherence to speed limits; implementation of revegetation and habitat mitigation (see Fish and Wildlife Habitat Conditions 1, 2 and 3); and long-term WGS monitoring of colonies identified

1 during preconstruction surveys. These measures are identified and as site certificate conditions
2 in Section IV.H. *Fish and Wildlife Habitat* of this order.

3
4 Based on compliance with the above-referenced conditions, the Council finds that the design,
5 construction and operation of the facility will not be likely to significantly reduce the likelihood
6 of survivability or recovery of WGS.

7
8 Lawrence's milkvetch

9
10 There are 9,174 acres of suitable habitat (Perennial grassland, scattered rabbitbrush) for
11 Lawrence's milkvetch within the microsite area. Surveys were conducted within 8,664 acres
12 using intuitive controlled transect methodology from 2017-2020. Twelve populations, with
13 fruits present, totaling approximately 111 acres were identified within the analysis area.²¹⁵
14 Based on consultation with Oregon Department of Agriculture's Plant Conservation Division,
15 establishment of new plants in populations is sporadic and limited.²¹⁶ This means the likelihood
16 of new populations in previously surveyed areas of suitable habitat is unlikely.

17
18 The applicant commits to avoiding all previously identified populations and conducting
19 preconstruction rare-plant surveys within suitable habitat. Based on consultation with Oregon
20 Department of Agriculture's Plant Conservation Division, the Council imposes the following
21 condition, requiring preconstruction surveys, avoidance and additional measures if avoidance is
22 not practicable:

23
24 **Threatened or Endangered Species Condition 4 (PRE):** Prior to construction of the
25 facility, the certificate holder shall:

- 26 a. Submit a botanical survey protocol to the Department for review in consultation
27 with the Oregon Department of Agriculture. The protocol shall apply to areas of
28 suitable habitat for Lawrence's milkvetch using current habitat classification data and
29 areas of ground disturbance. Previous survey results may be relied upon if
30 determined appropriate during review and approval of the protocol.
- 31 b. Conduct botanical surveys to confirm the presence or absence of Lawrence's
32 milkvetch, within suitable habitat in areas of permanent or temporary disturbance.
- 33 c. Survey results must be submitted to the Department and Oregon Department of
34 Agriculture's Native Plant Conservation Division. If the pre-construction surveys
35 identify these or any other state threatened or endangered plant species, the
36 certificate holder shall complete an impact assessment to determine whether
37 temporary or permanent impacts would significantly reduce the likelihood of
38 survivability or recovery of the impacted species, and shall propose mitigation, as
39 determined appropriate by the Department, in consultation with the Oregon
40 Department of Agriculture or its third-party consultant, as necessary. These
41 measures may include avoidance, or if avoidance is not possible, other measures

²¹⁵ NHWAPDoc2-15 ASC Exhibit P. Fish and Wildlife_2022-01-31. Pages 21-22 of 619, Table 2.

²¹⁶ NHWAPDoc5-6 ASC Reviewing Agency Comment ODAg 2022-04-01.

1 such as seed collection may be considered. If rare plants are identified within a
2 public right-of-way and cannot be avoided by construction, then in accordance with
3 ORS 564, written permission from the landowner or lease holder must be obtained.
4 If seed collection is determined to be feasible and warranted, a permit from the
5 Oregon Department of Agriculture must be obtained in accordance with OAR 603-
6 073-0100 (3).

7 [PRE-TE-02]
8

9 Facility ground-disturbing activities could result in indirect impacts to Lawrence's milkvetch
10 from dust and noxious weeds. Oregon Department of Agriculture recommends that identified
11 populations of Lawrence's milkvetch be flagged to ensure avoidance using a 20-foot buffer
12 (record of consultation provided in Attachment B of this order). The Council imposes the
13 following condition to ensure that all identified populations are flagged and avoided during
14 proximate ground disturbing activities in accordance with ODA's recommendation.
15

16 **Threatened or Endangered Species Condition 5 (GEN):** Certificate holder shall maintain
17 a map of previously identified Lawrence's milkvetch populations within the micrositeing
18 area. The map shall be used to inform flagging or other avoidance mechanism to ensure
19 avoidance of ground disturbance within 20-feet of the populations. The avoidance
20 flagging areas may be updated at any time based on more current survey results, if
21 completed.

22 [GEN-TE-01]
23

24 Applicant identifies that speed limits and worker training would ensure dust impacts are
25 minimized. Applicant also describes that it would adhere to the requirements of a Revegetation
26 Plan including revegetation, noxious weed control, topsoil salvage and soil stabilization that
27 would minimize potential indirect impacts to Lawrence's milkvetch. The Council requires that
28 the applicant adhere to the components of a Revegetation and Noxious Weed Plan (See
29 Attachment P-2), to be finalized prior to construction, through Fish and Wildlife Habitat
30 Conditions 1, 2 and 3 (see Section IV.H. *Fish and Wildlife Habitat* of this order).
31

32 **Conclusions of Law**

33 Based on the foregoing findings of fact and conclusions, and subject to compliance with the site
34 certificate conditions, the Council finds that the facility would comply with the Council's
35 Threatened and Endangered Species standard.

36 **IV.J. Scenic Resources: OAR 345-022-0080**

37

- 38 1. *Except for facilities described in section (2), to issue a site certificate, the Council*
39 *must find that the design, construction and operation of the facility, taking into*
40 *account mitigation, are not likely to result in significant adverse impact to scenic*
41 *resources and values identified as significant or important in local land use plans,*

1 *tribal land management plans and federal land management plans for any lands*
2 *located within the analysis area described in the project order.***

3
4 In applying the standard set forth in OAR 345-022-0080(1), the Council assesses the impact of a
5 proposed facility by evaluating the visibility of vegetation loss, structures, plumes and visible
6 emissions at significant or important scenic resources described in “local land use plans, tribal
7 land management plans and federal land management plans for any lands located within the
8 analysis area described in the project order.” For purposes of this rule, “local land use plans”
9 includes applicable state land use and management plans.

10
11 As established in the Amended Project Order, the analysis area for the Scenic Resources
12 standard is the area within and extending 10-miles from the proposed site boundary. The
13 applicant’s evaluation of scenic resources within the analysis area, and potential impacts from
14 construction and operation of the facility to the identified scenic resource are provided in ASC
15 Exhibit R.

16 17 **Findings of Fact**

18
19 The analysis area includes land governed or managed by Umatilla and Morrow counties; cities
20 of Hermiston, Stanfield, Echo, Irrigon, and Pilot Rock; ODFW; BLM; USACE, and USFWS. Local,
21 state and federal land management plans reviewed by the applicant to determine the presence
22 of an important or significant scenic resource within the analysis area are presented below:

23 24 **Local (Counties and Cities)**

- 25 • Morrow County Comprehensive Plan (2013)
- 26 • Umatilla County Comprehensive Plan (1984; 2017)
- 27 • City of Irrigon Comprehensive Plan Technical Report (2005), Development Code (2017)
- 28 • City of Umatilla Comprehensive Land Use Plan (2013)
- 29 • City of Hermiston Comprehensive Plan and Development Code (2018)
- 30 • City of Stanfield Comprehensive Plan (2001), Development Code (2003)
- 31 • City of Echo Comprehensive Plan (2005), Zoning Administrative Regulations (2015)
- 32 • City of Pendleton Comprehensive Plan (2013), Unified Development Code (2017)
- 33 • City of Pilot Rock Comprehensive Plan (1979), Ordinance 489 (2001)

34 **State**

- 35 • Oregon Department of Fish and Wildlife (ODFW) – Columbia Basin Wildlife Areas
36 Management Plan (2008)

37 **Federal**

- 38 • Bureau of Land Management (BLM) – Baker Resource Management Plan (1989)
- 39 • US Fish and Wildlife (USFWS) – Umatilla National Wildlife Refuge Comprehensive
40 Conservation Plan (2007)
- 41 • US Army Corps of Engineers (USACE) - Lake Umatilla and Lake Wallula Recreation
42 Management Areas – John Day Lock and Dam Master Plan (1976), McNary Shoreline
43 Management Plan (2012)

1
2 Based on review of the applicant's list of plans and counties and cities identified in ASC Exhibit R
3 Figure R-1, the Council finds that the applicant has adequately identified local, state and federal
4 land management plans that would apply to lands within the scenic resources analysis area, to
5 evaluate potential scenic resources that could be impacted by the facility. As established in the
6 Amended Project Order, if significant adverse impacts from the facility could occur to scenic
7 resources beyond the analysis area or to resources identified after issuance of the draft
8 proposed order, the applicant is obligated to assess those impacts.

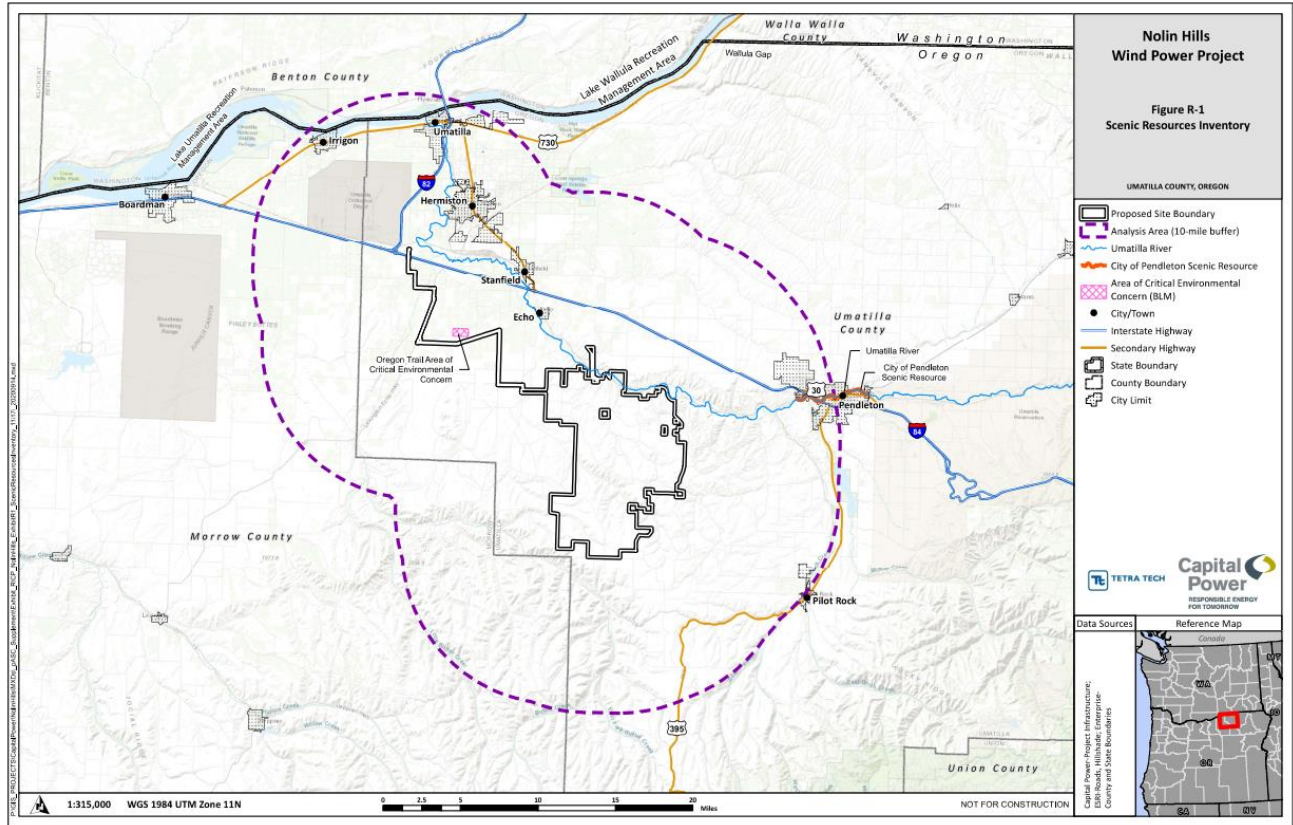
9
10 From the above-referenced plans, two scenic resources were identified as "significant" or
11 "important" within the analysis area including portions of the Umatilla River within the City of
12 Pendleton and BLM's Echo Meadows site. The location of these two protected scenic resources
13 is presented in Figure 7: *Important or Significant Scenic Resources within the Analysis Area*.

14
15 Portions of the Umatilla River and its tributaries (within the City of Pendleton) are identified in
16 the City of Pendleton's Comprehensive Plan as the most significant scenic area in the city, and
17 that any urban use that intrudes into the vegetation or alters the banks of the levee may
18 conflict with the scenic beauty of the waterway.

19
20 Echo Meadows is a federally designated 320-acre Area of Critical Environmental Concern
21 (ACEC), managed by the U.S. Bureau of Land Management (BLM) for the preservation and
22 enjoyment of the remaining evidence of the Oregon Trail. The National Park Service (NPS) has
23 designated the site as significant on the Oregon National Historic Trail (ONHT). Visitors can hike
24 along a paved trail to see nearly one mile of intact wagon ruts and read interpretive signs about
25 the area and its history. The site receives about 850 visitors per year.²¹⁷
26

²¹⁷ NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01.31 Pages 17-18 of 27, Section 4.1. Personal communication cited: Rachael Katz, Tetra Tech, and Brian Woolf, BLM Vale District, Baker Office, August 6, 2018.

Figure 7: Important or Significant Scenic Resources within the Analysis Area



The distance from the closest micrositing corridor area of facility components to the identified scenic resources are presented in Table 12 below.

Table 12: Important Scenic Resources, Distance from Proposed Site Boundary and Potential Visibility of Facility Components

Important Scenic Resource	Distance from Proposed Site Boundary	Visibility Assessment of Facility Components
Umatilla River (City of Pendleton)	Distance to Turbines: 7.6 miles Distance to BPA Transmission Line: > 10 miles	Turbines: 0-60 visible BPA Transmission Line: barely visible
Echo Meadows ACEC-ONHT (BLM)	Distance to Turbines: 6.4 miles Distance to UEC Transmission Line: 0.2 miles	Turbines: 0-112 visible UEC Transmission Line: visible

The closest facility component to the portions of the Umatilla River within the City of Pendleton would be wind turbines at a distance of 7.6 miles. While the proposed 230 kV BPA Stanfield transmission line would cross the Umatilla River, the crossing would occur in Umatilla County, over a segment that is not designated as a scenic resource. The closest facility component to the Echo Meadows site is the proposed 230 kV UEC Cottonwood transmission line at a distance

1 of 0.2 miles. The assessment of facility visibility and impacts to these two resources is
2 presented below.

3 4 Visual Impact Assessment

5
6 Visibility impacts from vegetation loss and facility structures were evaluated. The facility does
7 not include combustion or thermal heat sources; therefore, the facility would not result in
8 plumes or visible air emissions.

9
10 Visibility impacts from vegetation loss are based on amount of disturbance and distance from
11 disturbance. The facility would result vegetation loss including approximately 2,035 acres of
12 permanent disturbance and 2,079 acres of temporary disturbance. The most substantial
13 vegetation loss would be from construction of the wind and solar facility components. Based on
14 a distance greater than 5 miles from proposed wind and solar facility components to the Echo
15 Meadows site and portions of the Umatilla River (within City of Pendleton) considered a scenic
16 resource, vegetation loss would not be discernable. The vegetation loss from construction and
17 operation of the proposed UEC Cottonwood transmission line at the Echo Meadows site would
18 not be distinguishable given the limited amount of disturbance that would occur for placement
19 of structures, combined with the existing viewshed which includes cropland, grassland, shrubs
20 and an existing transmission line. Based on these facts, the Council finds that vegetation loss
21 from the facility would not be likely to result in a significant adverse impact to the scenic
22 resources identified within the analysis area.

23
24 Visibility impacts from structures were evaluated using a zone of visual influence (ZVI) analysis
25 (also known as a viewshed or visibility analysis), characteristics of the existing viewshed, and for
26 the proposed 230 kV UEC Cottonwood transmission line – photo simulations. A ZVI analysis
27 uses Environmental Systems Research Institute ArcGIS software to identify areas from which
28 facility wind turbines, at a maximum blade-tip height of 496 feet, and transmission line towers,
29 at a height of 100 and 140 feet (I-84 crossing), might be visible.²¹⁸ The results of the ZVI-
30 visibility analysis are presented in Figures 8, 9 and 10 below. Photo simulations of the proposed
31 230 kV UEC Cottonwood transmission line at key points of the Echo Meadows site are
32 presented in Figure 11 below.

²¹⁸ The ZVI “bare-earth” modeling approach considers effects of terrain (topography) on visibility and does not consider the effects of distance, lighting, weather, and atmospheric attenuation factors that diminish visibility under actual field conditions. A bare-earth analysis also does not account for the effects of vegetation or buildings, which can in practice block or screen views in some places.

Figure 8: Zone of Visual Impacts of Turbine Visibility within Analysis Area

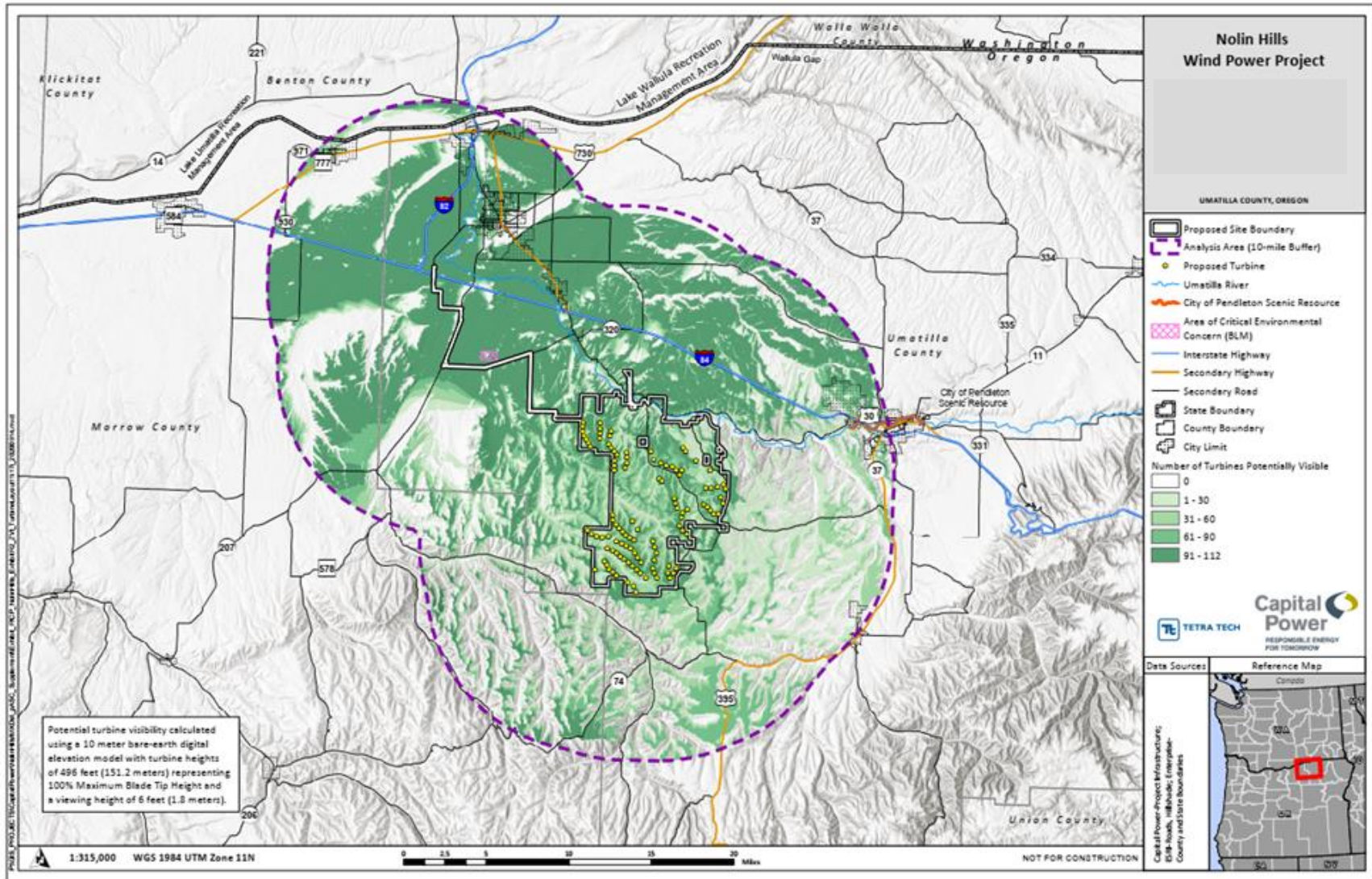


Figure 9: Zone of Visual Impacts of UEC Transmission Line Route

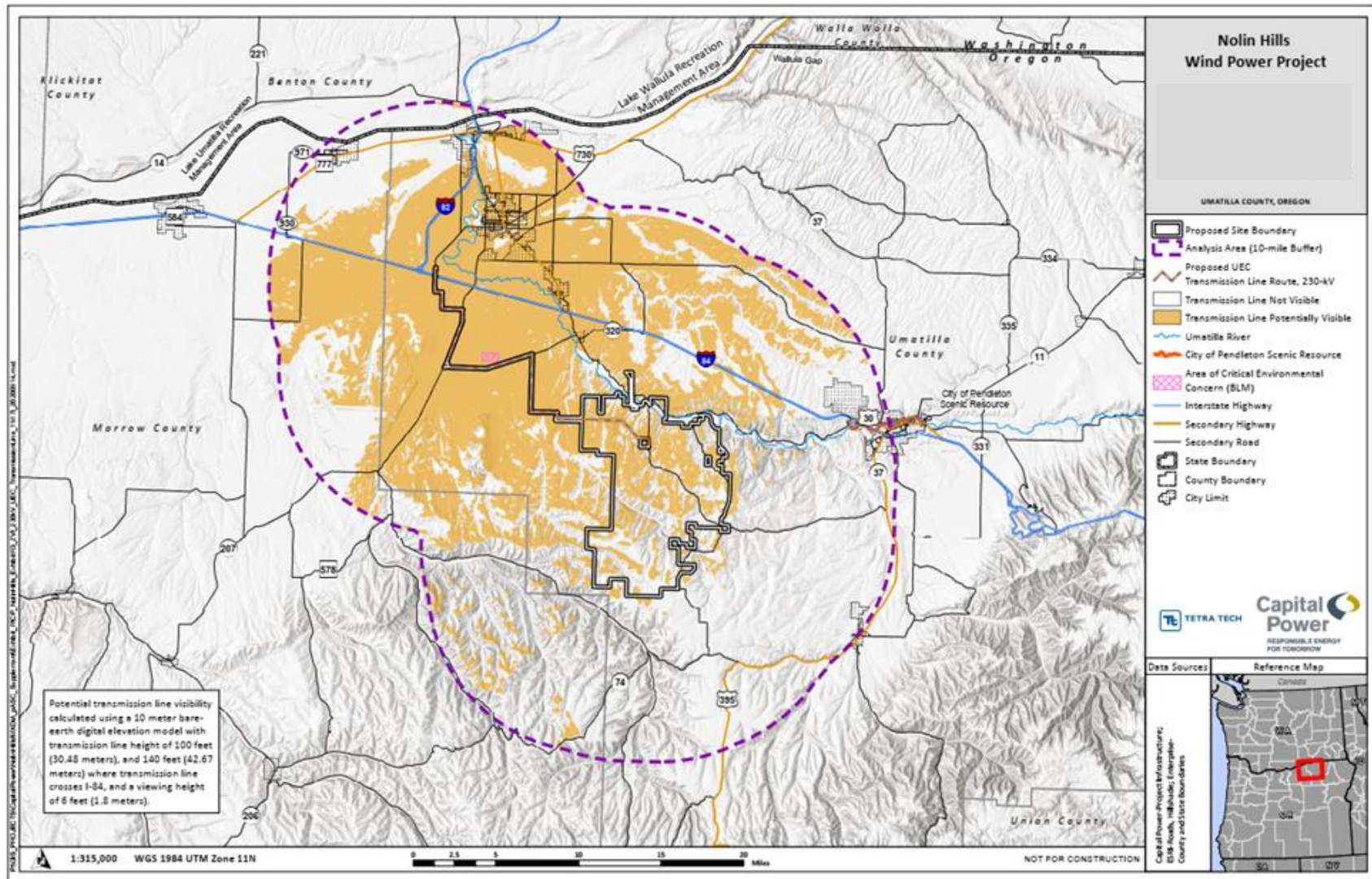
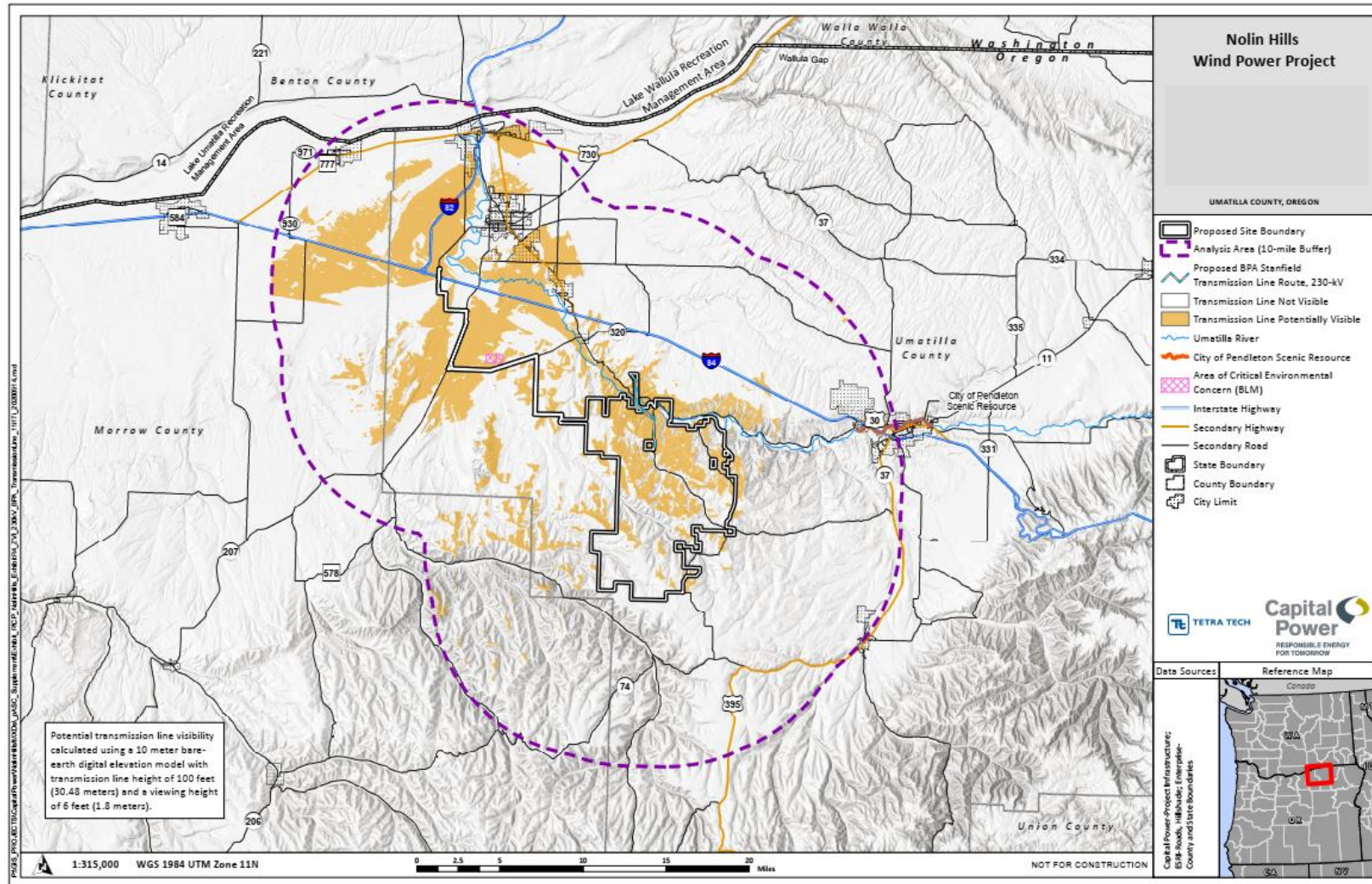


Figure 10: Visual Impact Assessment of BPA Transmission Route on Umatilla River, Pendleton



Potential Impacts of Facility Visibility at Echo Meadows Site ACEC

The ZVI analysis demonstrates that, at the Echo Meadows ACEC, the proposed 230 kV UEC Cottonwood transmission line (0.2 mile) would be visible at a foreground viewing distance and wind turbines would be visible at a highly variable visibility at a background viewing distance (6.4 miles or more). Based on the distance and variability, the Council finds that the impact of wind turbine visibility at the Echo Meadows site would be moderate.

Based on the proximity of the proposed 230 UEC Cottonwood transmission line to the Echo Meadows site, photo simulations are relied upon to further evaluate the significance of potential visibility impacts. Photo simulations of existing conditions, and future conditions with the proposed 230 kV UEC transmission line route, from the Echo Meadows site are presented in Figure 11 below. As presented, the photo simulations demonstrate the existing viewshed includes wind turbines (from other facilities), existing UEC and other power lines, agricultural structures, and multiple center-pivot agricultural irrigation systems. The photo simulation also demonstrates that the proposed 230 kV UEC transmission line route would not be visible when visitors are oriented toward the remnant Oregon Trail ruts. However, where not screened by topography, the proposed transmission line would introduce new, moderately contrasting middle-ground and background features in the viewshed of Echo Meadows.

Figure 11: Echo Meadows Photographic Simulations



BLM, the managing agency of the Echo Meadows site, affirmed that visibility of the proposed transmission line would conform with BLM's visual resource zone for the viewshed.²¹⁹ Based on review of the applicant's ZVI analysis and photo simulation, consideration of the existing viewshed and BLM's comments on conformance, the Council finds that visibility of the proposed 230 kV UEC Cottonwood transmission line would not impact the use or enjoyment of the resource by the public and therefore would not be likely to result in significant adverse visual impacts to the Echo Meadows site.

Potential Impacts of Facility Visibility at Umatilla River

The ZVI analysis presented in Figure 8 above demonstrates that viewers from the portions of the Umatilla River considered a scenic resource, within the City of Pendleton, could see 0 to 60 wind turbines on the horizon, depending on their location along the river within the city. Trees and other vegetation adjacent to the river, and structures in the urbanized setting, would limit potential viewpoints of wind turbines. From the river looking toward the facility, the existing viewshed includes roadways, bridges and existing transmission line crossings, residential and commercial buildings, and agricultural fields. Based on the distance (over 5-miles), occasional views of wind turbines would not feature prominently in the viewshed.

The ZVI analysis presented in Figure 10 presents visibility impacts from the proposed 230 kV BPA Stanfield transmission line at the Umatilla River. Because the transmission line would be 400 feet lower than wind turbines and located at greater distances than wind turbines from the portion of the Umatilla River considered a scenic resource, views of the transmission line would be lesser than that of the proposed wind turbines.

Based on the results of the ZVI, distance and characteristics of the existing viewshed, as described above, the Council finds that the facility will not be likely to result in significant adverse visual impacts to the portions of the Umatilla River within City of Pendleton considered a scenic resource.

Conclusion of Law

Based on the findings of fact, reasoning and analysis, the Council finds that the facility will satisfy the Council's Scenic Resources standard.

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

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

²¹⁹ BLM's Outdoor Recreation Planner Brian Woolf stated that the proposed transmission line would be in "conformance with the BLM's visual resource zoning for that viewshed." NHWAPPDoc3-12 pASC BLM comment Protected Areas impacts Echo Meadows Woolf 2021-04-30.

- (a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;*
- (b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and*
- (c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).*
- (2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.*

Findings of Fact

The analysis area for the Historic, Cultural and Archaeological Resources standard, as established in the Amended Project Order, is the area within the site boundary; if potentially affected resources, including but not limited to Traditional Cultural Properties or Historic Properties of Religious and Cultural Significance to Indian Tribes (HPRCSITs), are identified (e.g., through coordination with the State Historic Preservation Office (SHPO) and/or coordination with potentially affected tribes as identified by the Legislative Commission on Indian Services), the analysis area shall be expanded to include those resources, if determined warranted by the Department.²²⁰

Resources protected under the standard include archeological sites (ORS 358.905(1)(c)), archeological objects (ORS 358.905(1)(a)) and any historic, cultural or archeological resource listed or likely eligible for listing on the National Register of Historic Places (NRHP).

IV.K.1. Department Evaluation of Applicant's Discovery Measures

Discovery measures to evaluate the presence of protected resources within the analysis area may include surveys, inventories and limited subsurface testing. An applicant's discovery measures must be based on recommendations from SHPO or the National Park Service (NPS) of the U.S. Department of Interior (OAR 345-021-0010(1)(s)(D)(i)); if the discovery measures are not based on the recommendations of SHPO or NPS, an applicant must provide an explanation (OAR 345-021-0010(1)(s)(D)(ii)). SHPO recommendations on discovery measures are provided in its *2011 Guidelines for Historic Resources Surveys in Oregon* and *2016 Guidelines for Conducting Field Archeology in Oregon*.²²¹ If applicant's discovery measures follow SHPO's published guidelines, it can be applied that their discovery measures for historic and archaeological resources are based on SHPO recommendations, unless applicant seeks, or SHPO provides, more specific recommendations through the EFSC process. The applicant has engaged SHPO and tribes in the discovery efforts undertaken for the facility under this standard.

²²⁰ NHWAPDoc8 Amended Project Order 2021-08-02.

²²¹ NHWAPDoc2-18 ASC Exhibit S. Cultural_2022-01-31 Page 34 of 80.

Different discovery measures apply to the investigation for archeological sites, archeological objects, aboveground historic resources and tribal resources. The applicant's discovery measures represent a phased approach, where identification and field study have been conducted for most of the microsite area as part of the first phase in the ASC; additional identification, field study and evaluation would be completed in the second phase at preconstruction. The phased approach could result in review of impacts and mitigation, following Council approval of the site certificate, which is allowable under ORS 469.402, if the circumstances are warranted. This is further evaluated below.

For all of these resource types, an initial inventory was completed through literature/database review. The following databases and resources were reviewed to identify previous surveys and recorded resources within the analysis area:

- SHPO's Oregon Archeological Records Remote Access
- SHPO's Oregon Historic Sites Database
- Oregon Historic Trails website
- Historic maps and aerial photographs (including 1860 U.S. General Land Office plats for Umatilla County)
- Review of records on Ancestry.com
- Oregon's Historic Oregon Newspapers database

Traditional use surveys (TUS)/oral history interviews were completed for tribal resources. The above-referenced databases, sources and completion of oral history interview/TUS are consistent with SHPO's guidance for background research, per its *2016 Guidelines for Conducting Field Archeology in Oregon*.²²²

Non-collection pedestrian surveys were completed for archeological sites, objects and historic buildings and structures. Of the 15,726 acres, 15,467 acres were surveyed via "Non-collection" pedestrian surveys between July 5 and 26, 2017; May 15 and 22, 2018; August 7 and 8, 2018; July 8 and 13, 2019; May 1 and May 4, 2020, and August 31, 2020. Pedestrian surveys were conducted in 20-meter transects, using 1:24,000 scale maps and Global Positioning System units with sub-meter accuracy to maintain special control. This survey design is consistent with the *2016 Guidelines for Conducting Field Archeology in Oregon - Standard Field Methodology for Surface Surveys*.²²³

Pedestrian surveys to date have covered microsite corridors for the facility components and most of the transmission line alternatives. The surveyed areas included a 500-foot buffer on the

²²² SHPO's guidelines establish that background research should include a search of the Oregon Archeological Resources, relevant past relevant past archaeological study reports, Oregon Historic Sites and Structures Survey, National Register files, relevant historic contexts, historic maps and photographs (including General Land Office Survey maps and notes and Sanborn insurance maps) and any other pertinent publications, documents, records, and files. Accessed on March 31, 2022 by the Department:

https://www.oregon.gov/oprd/OH/Documents/FieldGuidelines_January2016.pdf

²²³ *Ibid.* Page 32.

centerline of turbine strings (1,000-foot-wide corridor) and a 150-foot buffer on all other linear components (300-foot-wide corridor) within the main area of the wind facility. Widths of the survey corridors along the transmission line alternatives varied. No buffer was placed on the substations. Except for portions where access was not yet available at the time of survey, all portions of the microsites corridors have been surveyed. Shovel probing has not occurred in areas of poor ground surface visibility or in areas with high probability for buried archaeological resources. If these areas fall within temporary or permanent impact areas for the final design of the facility, they will be re-surveyed with better ground surface visibility and/or shovel probed prior to construction per the proposed Subsurface Probing Plan.

As non-collection surveys, no subsurface probing of archeological site boundaries, archeological object localities, areas of high probability for buried archeological resources, or areas of poor ground surface visibility was conducted. Applicant's explanation is that "Project design schedule allowed for conducted surveys first and microsites to avoid resources. Re-examination of areas of high probability and/or poor ground surface visibility during survey will occur after Project design is finalized and limited to construction corridors." SHPO's guidance states "It is normally not possible to establish the significance of an individual site without testing to determine the nature of subsurface deposits." Therefore, the lack of subsurface probing is not consistent with SHPO's guidelines, but because the applicant commits to avoiding all resources and conducting further sub-surface probing during preconstruction surveys (see Subsurface Probing Plan, Attachment S-3 of this order), the Council finds that the survey methods would be consistent with SHPO's guidelines. The results of the future subsurface probing are a future review and approval.

Unsurveyed areas include 486 acres within transmission line areas; and 259 acres within the microsites area. The 486 acres within the transmission line analysis area were unsurveyed due to lack of landowner permissions and safety issues. Applicant commits to surveying any unsurveyed areas, prior to construction, in the locations of potential ground disturbance

The Council imposes a preconstruction condition that would require that the applicant conduct field investigations of all unsurveyed areas and resurvey previously surveyed areas that had low visibility within areas of potential ground disturbance, based on final facility design, and conduct subsurface probing in areas of high probability, low visibility and in locations where ground disturbance could occur within 50-meters of identified archeological objects. The Department also recommends that, if significant resources, impacts and additional management measures are recommended by the applicant, that the condition require the applicant to evaluate the results through the Amendment Determination Request process (OAR 345-027-0357) to determine whether a new resource or site certificate condition under a site certificate amendment is required.

Historic, Cultural and Archeological Resources Condition 1 (PRE): Prior to construction, the certificate holder shall:

- a. Submit to the Department and SHPO a research design consistent with SHPO's archeological guidelines and recommendations for unsurveyed areas, and the Subsurface Probing Plan included as Attachment S-3 of the Final Order on the ASC,
- b. Complete archeological field investigations and subsurface probing in accordance with the research design and Subsurface Probing Plan under (a). Submit survey reports to the Department and SHPO. Any new resources and management recommendations identified must be evaluated under OAR 345-027-0357 to determine whether a site certificate amendment is required. Resources and management recommendations shall be reviewed by the Department in consultation with SHPO or a third-party consultant within 60-days. Once approved, the management recommendations shall be incorporated into the Monitoring and Inadvertent Discovery Plan, per Historic, Cultural and Archeological Resources Condition 2.

[PRE-HC-01]

For aboveground, historic resources, a historic and cultural resources inventory was conducted on specific historic properties within the analysis area identified by SHPO during review of the preliminary ASC.²²⁴

IV.K.2. Evaluation, Avoidance, and Mitigation for Impacts to Historic, Cultural, and Archeological Resources

Results of the applicant's discovery measures identified 43 archeological sites, 20 archeological objects and 4 aboveground, historic resources within the analysis area. The NRHP listing status, or likely eligibility for listing, potential impacts from facility construction and operation to likely or listed NRHP resources and proposed avoidance measures are presented in the subsections below.

IV.K.2.a. Archeological Sites

Forty-three (43) archeological sites were identified within the analysis area, twenty-nine (29) were identified as HPRCSITs by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). Of the forty-three archeological sites, fourteen (14) non-HPRCSIT archeological sites are presented in Table 13 below; and the twenty-nine (29) HPRCSIT archeological sites are presented in Table 14 below.

As presented in Table 13, of the fourteen non-HPRCSIT archeological sites, 1 is NRHP-listed, 9 are recommended by the applicant as not-likely eligible and 4 are recommended as unevaluated (treated as likely-NRHP eligible). The Department's evaluation of potential direct and indirect impacts, and applicant's proposed avoidance and mitigation, is presented below.

²²⁴ NHWAPPDoc3-6 pASC SHPO comment. 2020-12-22.

Table 13: Archeological Sites (non-HPRCSIT) within Analysis Area

Resource ID or Trinomial	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance and Mitigation Measure	Resource Type (a, b)¹
Oregon National Historic Trail (NHT)	Trail	Listed	0	No direct impacts; indirect impacts from transmission line; mitigation through recordation.	(a); (b)
NH-BB-01	Survey Marker	Not-likely	57	No direct impacts. Applicant commits to avoidance.	(b)
NH-BB-02	Refuse Scatter	Not-likely	229	No direct impacts. Applicant commits to avoidance.	(b)
NH-BB-03	Structural Remains	Unevaluated (likely)	57	No direct impacts. Applicant commits to flag and monitor within 61-meters.	(a); (b)
NH-BB-04	Road	Not-likely	146	No direct impacts. Applicant commits to avoidance.	(b)
35UM 00538	Road	Not-likely	0	Direct impacts. Mitigation of recording.	(b)
35UM 00539	Structure/Foundation	Unevaluated (likely)	120	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00545	Utility Line	Unevaluated (likely)	260	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(b)
35UM 00546	Historic Agricultural Refuse	Unevaluated (likely)	264	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(b)

Table 13: Archeological Sites (non-HPRCSIT) within Analysis Area

Resource ID or Trinomial	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance and Mitigation Measure	Resource Type (a, b) ¹
35UM 00554	Rock Pile	Not-likely	62	No direct impacts. Applicant commits to avoidance.	(b)
35UM 00558	Road	Not-likely	174	No direct impacts. Applicant commits to avoidance.	(b)
35UM 00570	Road	Not-likely	0	Direct impacts. Mitigation of recording.	(b)
35UM 00572	Road	Not-likely	613	No direct impacts. Applicant commits to avoidance.	(b)
35UM 00573	Road	Not-likely	650	No direct impacts. Applicant commits to avoidance.	(b)
<p>Notes:</p> <p>Resource definition:</p> <p>(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;</p> <p>(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c).</p> <p>NRHP eligibility determination shaded in "grey" represents determinations agreed upon by the Department's third-party consultant, Historical Research Associates, Inc. These determinations were sought by the Department because the applicant identified potential impacts to the resources. Source: NHWAPDoc6 pASC HRA Exhibit S Review_2021-05-21</p>					

Listed NRHP Resource

One NRHP listed archeological site was identified in the analysis area - Oregon National Historic Trail (ONHT). The proposed 230 kV UEC Cottonwood transmission line or the BPA Stanfield transmission line, whichever is selected as the grid-interconnection transmission line at final design, would span overhead the ONHT. There would be no direct impacts, but overhead spanning of the historic trail route would result in indirect impacts. Applicant's mitigation for direct impacts includes preservation through recordation of any visible ruts identified during preconstruction surveys. The applicant also executed a mitigation agreement with the Oregon-California Trails Association (OCTA), a non-profit organization dedicated to preserving and protecting overland emigrant trails and the emigrant experience. OCTA stated that the mitigation agreement "comprise the full extent of our requests for mitigation of facility-related impacts."²²⁵ Recordation of any visible ruts is mitigation through preservation of the history of the resource setting, and is a measure that Council is authorized to consider, consistent and/or in accordance with OAR 345-001-0010(33)(d) and (f).²²⁶ Applicant will ensure that discussion of the ONHT and the significance of intact trail ruts are included in any construction environmental training program for the facility.

Likely-NRHP Eligible Resources

Thirty-three (33) archeological sites considered likely NRHP eligible were identified within the analysis area. Twenty-nine (29) of the thirty-three (33) archeological sites were identified as HPRCSITs by CTUIR. Because the applicant and CTUIR agreed to evaluate impacts and mitigation to tribal resources outside of the EFSC process, the twenty-nine archeological resources identified as HPRCSITs are described separately below.

The 4 non-HPRCSIT likely-NRHP eligible archeological sites identified within the analysis area include: NH-BB-03 (structural remains); 35UM 00539 (structure); 35UM 00545 (utility line); and 35UM 00546 (agriculture). Applicant commits to avoiding direct impacts via adherence to a 50-meter buffer from the resource boundary. The applicant commits to identifying and avoiding these resources under its Draft Monitoring and Inadvertent Discovery Plan, provided as Attachment S-1 of this order. To ensure that these resources are identified prior to any ground-disturbing activities associated with construction, operations and maintenance or retirement, the Council imposes the following condition:

Historic, Cultural, and Archeological Resources Condition 2 (PRE): Prior to construction, the certificate holder shall finalize the Draft Monitoring and Inadvertent Discovery Plan

²²⁵ NHWAPDoc3-13 pASC OCTA Oregon Trails comment 2020-11-04.

²²⁶ OAR 345-001-0010(33)(d) states that "mitigation" means taking one or more of the following actions listed in order of priority: reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action my monitoring and taking appropriate corrective measures; and (f) states that mitigation means: implementing other measures approved by the Council.

(MIDP), based on Attachment S-1 of the Final Order on the ASC, based on review and approval by the Department. The final plan shall include:

- a. Tables 13, 14, and 15 of the Final Order on the ASC and maps of the final facility layout, resource location and established 50-meter avoidance buffer. Any additional resources identified in the preconstruction surveys per Historic, Cultural and Archeological Resources Condition 1 must also be included.
- b. Avoidance method (e.g., worker training, flagging) and monitoring protocol for ground-disturbing activities within 50-meters of previously identified precontact sites.
- c. Flagging and monitoring protocol for any ground-disturbing activities within 200-feet of NH-BB-03, 35UM 00536, 35UM 00543 35UM 00550, 35UM 00560 and 35UM 00571.

[PRE-HC-02]

Historic, Cultural, and Archeological Resources Condition 3 (GEN): During any ground-disturbing activities, the certificate holder shall adhere to the requirements of the MIDP. Any failures to adhere to the MIDP must be reported to the Department and SHPO; impacts must be addressed and mitigation measures must be proposed and implemented for any listed or likely-NRHP eligible resources; worker training may be used to address impacts to resources identified as not-likely NRHP eligible.

[GEN-HC-01]

Historic, Cultural, and Archeological Resources Condition 4 (GEN): Results of monitoring and any efforts conducted as a result of the inadvertent discovery protocols under the MIDP shall be documented in a Monitoring Report submitted to the Department in the semi-annual or annual report, or as soon as practical in circumstances of a discovery or monitoring issue.

[GEN-HC-02]

Based on compliance with the above-referenced conditions, the Council finds that the design, construction, operation, and retirement of the facility will not be likely to result in significant adverse impacts to the identified NRHP-listed and likely-NRHP eligible resources.

Not-likely NRHP Eligible

There are 9 non-HPRCSIT archeological sites recommended by the applicant as not-likely NRHP eligible within the analysis area. The recommendation of not-likely NRHP eligible is based on the applicant's preliminary recommendations by a qualified archeologist who conducted the survey, which was submitted to both the Department and SHPO for review. The Department's third-party consultant, Historical Research Associates (HRA) agreed with the applicant's recommendation of not-likely NRHP eligible for two archeological sites – 35UM 00538 and 35UM 00570.²²⁷ If based upon final facility design, these resources cannot be avoided by the 50

²²⁷ NHWAPDoc6-1 pASC HRA Exhibit S Review_2021-05-21.

meter buffer, additional NRHP evaluation may be required in order for SHPO to concur with the NRHP eligibility recommendation. Regardless of the likelihood of NRHP-eligibility, the applicant commits to avoiding any direct impacts to these resources by adhering to a 50-meter avoidance buffer from the resource boundary. Based on these representations, the Council finds that these resources similarly be identified within the MIDP, per Historic, Cultural and Archeological Resources Condition 2, and protected from any direct, physical impacts. Because these resources are recommended as not-likely NRHP eligible, enhanced worker training may be used if there are circumstances where disturbance impacts occur within the avoidance buffers.

Likely-NRHP Eligible Tribal Resources

There are twenty-nine archeological sites recommended by the applicant as unevaluated (considered likely NHRP eligible) and identified by CTUIR as HPRCSITs, as presented in Table 14 below. These HPRCSITs include rock cairns, Mud Springs, a network of trails and travel corridors, and First Foods procurement areas. Informants also described the turbine area as possibly containing unmarked burials. The applicant commits to avoiding direct impacts to these 29 archaeological HPRCSIT resources by adhering to a flagged 50-meter avoidance area and monitoring if disturbance will occur within 61 meters (200 feet) of the resource. The applicant also proposes to mitigate potential impacts through the terms and conditions of a confidential agreement with the CTUIR and its MIDP, which includes employing a CTUIR cultural monitor during subsurface probing and ground disturbing construction activities within 200-feet of a protected resource. CTUIR confirmed that their concerns regarding potential effects of the facility are addressed through the confidential mitigation agreement.²²⁸ Based on CTUIR's acknowledgement of satisfaction with the external mitigation agreement and the applicant's commitment to avoid, monitor and flag resources, the Council finds that the design, construction and operation of the facility would not be likely to result in significant adverse impacts to the identified unevaluated (likely-NHRP eligible) archeological HPRCSIT resources.

²²⁸ NHWAPPDoc3-4 pASC CTUIR comment received 2020-11-10.

Table 14: Archeological, HPRCSIT Sites within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure	Resource Type (a, b)¹
35UM 00536	Lithic Scatter/HPRCSIT	Unevaluated	51	No direct impacts. Flag and monitor within 61 meters.	(a); (b)
35UM 00537	Lithic Scatter/HPRCSIT	Unevaluated	986	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00540	Cairn(s)/HPRCSIT	Unevaluated	579	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00541	Cairn(s)/HPRCSIT	Unevaluated	243	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00542	Cairn(s)/HPRCSIT	Unevaluated	172	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00543	Rock Alignment(s)/HPRCSIT	Unevaluated	51	No direct impacts. Flag and monitor within 61 meters.	(a); (b)
35UM 00544	Rock Alignment(s)/HPRCSIT	Unevaluated	194	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00547	Cairn(s)/HPRCSIT	Unevaluated	420	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)

Table 14: Archeological, HPRCSIT Sites within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure	Resource Type (a, b)¹
35UM 00548	Lithic Scatter/HPRCSIT	Unevaluated	397	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00549	Lithic Scatter/HPRCSIT	Unevaluated	131	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00550	Rock Alignment(s)/HPRCSIT	Unevaluated	54	No direct impacts. Flag and monitor within 61 meters.	(a); (b)
35UM 00551	Rock Pile/HPRCSIT	Unevaluated	1,092	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00552	Cairn(s)/HPRCSIT	Unevaluated	108	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00553	Cairn(s)/HPRCSIT	Unevaluated	85	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00555	Cairn(s)/HPRCSIT	Unevaluated	99	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00556	Cairn(s)/HPRCSIT	Unevaluated	91	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)

Table 14: Archeological, HPRCSIT Sites within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure	Resource Type (a, b)¹
35UM 00557	Cairn(s)/HPRCSIT	Unevaluated	173	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00559	Cairn(s)/HPRCSIT	Unevaluated	599	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00560	Cairn(s) & Rock Alignment/HPRCSIT	Unevaluated	15	No direct impacts. Flag and monitor within 61 meters.	(a); (b)
35UM 00561	Hunting Blind(s)/HPRCSIT	Unevaluated	141	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00562	Rock Pile/HPRCSIT	Unevaluated	328	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00563	Cairn(s)/HPRCSIT	Unevaluated	223	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00564	Cairn(s), Hunting Blind, Rock Concentration/HPRCSIT	Unevaluated	503	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00565	Rock Pile/HPRCSIT	Unevaluated	1,130	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)

Table 14: Archeological, HPRCSIT Sites within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure	Resource Type (a, b)¹
35UM 00566	Cairn(s)/HPRCSIT	Unevaluated	308	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00567	Cairn(s)/HPRCSIT	Unevaluated	349	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00568	Cairn(s) & Rock Alignment/HPRCSIT	Unevaluated	279	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00569	Cairn(s)/HPRCSIT	Unevaluated	123	No direct impacts. Applicant commits to 50-meter avoidance buffer.	(a); (b)
35UM 00571	Cairn(s)/HPRCSIT	Unevaluated	43	No direct impacts. Flag and monitor within 61 meters.	(a); (b)
<p>Notes:</p> <p>Resource definition:</p> <p>(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;</p> <p>(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c).</p>					

IV.K.2.b. Archeological Objects

There are twenty (20) archeological objects recommended by the applicant as not-likely NRHP eligible, as presented in Table 15. Regardless of the NRHP-eligibility, the applicant commits to avoiding direct, physical impacts or further evaluation through shovel-probing for any archeological object located within 50 meters of potential ground disturbing activities. The Draft Subsurface Probing Plan (Attachment S-3) submitted by the applicant was prepared in consultation with the SHPO and follows the 2016 SHPO Guidelines for Conducting Field Archaeology in Oregon.

Table 15: Archeological Objects within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure
NH-BB-ISO-01	Refuse	Not-likely	29	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-DM-ISO-01	Debitage	Not-likely	91	No direct impacts. Applicant commits to avoiding resource.
NH-DM-ISO-02	Refuse	Not-likely	117	No direct impacts. Applicant commits to avoiding resource.
NH-DM-ISO-03	Groundstone	Not-likely	19	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-DM-ISO-04	Refuse	Not-likely	12	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-DM-ISO-05	Agriculture	Not-likely	365	No direct impacts. Applicant commits to avoiding resource.
NH-DM-ISO-06	Refuse	Not-likely	285	No direct impacts. Applicant commits to avoiding resource.

Table 15: Archeological Objects within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure
NH-DM-ISO-07	Debitage	Not-likely	992	No direct impacts. Applicant commits to avoiding resource.
NH-DM-ISO-08	Debitage	Not-likely	157	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-01	Refuse	Not-likely	176	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-02	Core	Not-likely	24	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-MC-ISO-03	Debitage	Not-likely	49	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-MC-ISO-04	Debitage	Not-likely	29	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NH-MC-ISO-05	Refuse	Not-likely	1,505	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-06	Refuse	Not-likely	677	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-07	Refuse	Not-likely	147	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-08	Core	Not-likely	378	No direct impacts. Applicant commits to avoiding resource.
NH-MC-ISO-09	Debitage	Not-likely	332	No direct impacts. Applicant commits to avoiding resource.

Table 15: Archeological Objects within Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure
NHS-BB-ISO-01	Refuse	Not-likely	3	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.
NHS-BB-ISO-02	Refuse	Not-likely	0	Direct impacts; shovel probing and supplemental survey report with management recommendations, for ODOE, SHPO and tribal review.

1 The applicant's draft Subsurface Probing Plan was developed in consultation with SHPO and the
2 Department and is included as Attachment S-3 of this order and required under Historic,
3 Cultural and Archeological Condition 1.

4
5 IV.K.2.c. Historic Aboveground Resources
6

7 Four (4) aboveground, historic sites were identified within the analysis area and are likely
8 NRHP-eligible because of their association with the agricultural history of the area. These
9 resources include: Property on T2N/R30E - Barn, Foundation and Associated structures;
10 Property on T2N/R29E - Residence, barn, and windmill; Pendleton Ranches Sheep Camp/Bunk
11 House; and the Town of Nolin, as presented in Table 16: *Historic/Built Environment Resources*
12 *within the Analysis Area* below.
13

1

Table 16: Historic/Built Environment Resources within the Analysis Area

Resource	General Description	Applicant's Recommended NRHP Determination	Distance to Nearest Temporary Disturbance (meters)	Potential Impacts/Avoidance Measure
Property on T2N/R30E	Large barn, smaller shed, foundation of a residence	Likely-eligible	244	Visual impacts to setting/HRMP
Property on T2N/R29E	Residence, barn, windmill	Likely-eligible	366	
Pendleton Ranches Sheep Camp/Bunk House	Bunkhouse	Likely-eligible	86	
Town of Nolin	Sheep Ranch Headquarters	Likely-eligible	701	No impacts
Acronyms: HRMP = Historical Resources Mitigation Plan; NRHP = National Register of Historic Places				

2

3 Based on the distance from wind turbines/disturbance to these resources, the setting of three of the four resources could be
4 significantly impacted as a result of indirect visual effects of proposed wind turbines. At a distance of 701 meters, and downhill from
5 the facility, impacts from facility visibility to the Town of Nolin are recommended as not likely to be potentially significant. The other
6 three aboveground resources, potential impacts from facility visibility and mitigation are described below.

1 *Property at T2N/R30E, Property at T2N/R29E and Pendleton Ranches Sheep Camp/Bunk House*

- 2
- 3 • The property at T2N/R30E is presented in Photograph 3 of ASC Exhibit S Attachment S-6.²²⁹ It includes an unused and dilapidated wooden barn, a smaller storage shed, and a
- 4 stone foundation that included steps down into a basement with no remaining
- 5 aboveground features. Blades of 34 wind turbines and towers + blades of 12 wind
- 6 turbines would be visible at this resource.
- 7
- 8 • The property at T2N/R29E is presented in Photograph 4 of ASC Exhibit S Attachment S-6.²³⁰ It includes a residence, barn, and one windmill. Blades of 5 wind turbines and
- 9 towers + blades of 21 wind turbines would be visible at this resource.
- 10
- 11 • Pendleton Ranches Sheep Camp/Bunk House is presented in Photograph 2 of ASC
- 12 Exhibit S Attachment S-6.²³¹ The Pendleton Ranches Sheep Camp was used in the 1950s
- 13 and 1960s by agricultural field crews and consists of a historic sheep ranching camp with
- 14 two standing buildings – a bunkhouse and cistern. Blades of 9 wind turbines and towers
- 15 + blades of 5 wind turbines would be visible at this resource.
- 16

17 Applicant asserts that it cannot avoid or minimize the impacts of wind turbine visibility at any of

18 the above-referenced historic resources because “in order to achieve the full projected wind

19 energy generating capacity, no turbine locations can be changed to avoid these effects.”²³²

20 Therefore, the setting of these resources would be impacted by converting the viewshed from

21 existing rural, agricultural to energy infrastructure. To mitigate the potential significant, adverse

22 impacts, the applicant proposes to conduct an intensive level survey of: the stone foundation

23 and barns on the T2N/R30E property; the barn and residence on the T2N/R29E property; and

24 context of moveable ranching properties and bunkhouse for the Pendleton Ranches Sheep

25 Camp. The intensive level survey is proposed in the Historical Resource Mitigation Plan (HRMP)

26 in ASC Exhibit S Attachment S-6 and is included as Attachment S-2 of this order.

27

28 The intensive level survey in the HRMP would be conducted in accordance with *SHPO’s 2011*

29 *Guidelines for Historic Resources Surveys in Oregon* and include research, fieldwork and

30 reporting. The intensive level survey would mitigate the impact through preservation of the

31 history of the resource setting, and is a measure that Council is authorized to consider,

²²⁹ NHWAPPDoc2-18 ASC Exhibit S. Cultural_2022-01-31 Page 67 of 80, Attachment S-6.

²³⁰ *Id.*

²³¹ NHWAPPDoc2-18 ASC Exhibit S. Cultural_2022-01-31 Page 66 of 80, Attachment S-6.

²³² OAR 345-001-0010(33)(d) states that ““mitigation” means taking one or more of the following actions listed in order of priority..” The definition includes (a) through (f). Based on the impact, an indirect impact, and the applicant’s assertion that no turbine could be moved to avoid or minimize the impact, mitigation options start at (d). Mitigation (a) through (c) are as followed: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) partially or completely rectifying the impact by repairing, rehabilitating or restoring the affected environment.

1 consistent and/or in accordance with OAR 345-001-0010(33)(d) and (f).²³³ SHPO's Historic
2 Preservation Specialist Jason Allen confirmed that the language and content of the HRMP were
3 appropriately scaled and address the effects of the facility on the resources.²³⁴ For these
4 reasons, the Council finds that, with mitigation, the design, construction and operation of the
5 facility would not be likely to result in significant, adverse impacts to the Property on T2N/R30E;
6 Property at T2N/R29E or Pendleton Ranches Sheep Camp/Bunk House.

7
8 The Council imposes the following condition requiring that the applicant adhere to the
9 requirements of the HRMP:

10
11 **Historic, Cultural and Archeological Resources Condition 5 (PRE):** Prior to construction
12 of wind turbine components, the certificate holder shall:

- 13 a. Evaluate whether if, based on final facility design, the setting of any of the 3 likely
14 NRHP eligible aboveground, historic properties referenced in Table 16 of the Final
15 Order on the ASC would no longer be impacted by wind turbine visibility. If any of
16 these property settings would not be impacted, the mitigation requirements for
17 unimpacted resources would not apply.
- 18 b. Based on (a), submit a protocol or design of the Intensive Level Survey, consistent
19 with SHPO's 2011 Guidelines for Historic Resources Surveys in Oregon, for review
20 and approval by the Department, in consultation with SHPO;
- 21 c. Complete photo documentation of the setting of the properties at T2N/R30E and
22 T2N/R29E; and the Pendleton Ranches Sheep Camp/Bunk House, unless any of these
23 property settings would not be impacted per (a);
- 24 d. Initiate work detailed in the Historic Resources Mitigation Plan (HRMP), provided in
25 Attachment S-6 of the Final Order on the ASC, included as Attachment S-2 of this
26 order.

27 [PRE-HC-03]

28
29 **Historic, Cultural and Archeological Resources Condition 6 (GEN):** Within three years of
30 construction of wind turbine components, the certificate holder shall submit draft
31 reports documenting the results of the Intensive Level Surveys, of the HRMP under
32 Historic, Cultural and Archeological Condition 5, concurrently to the Department and
33 SHPO. Report cover pages to SHPO shall include a Department contact name and specify
34 that the report is submitted as mitigation for an EFSC facility. Any comments received
35 from the Department and SHPO within 30-days of the draft reports must be addressed
36 within final reports.

37 [GEN-HC-03]

²³³ OAR 345-001-0010(33)(d) states that "mitigation" means taking one or more of the following actions listed in order of priority: reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action my monitoring and taking appropriate corrective measures; and (f) states that mitigation means: implementing other measures approved by the Council.

²³⁴ NHWAPPDoc5-8 pASC SHPO Comment 2022-01-18.

1 **Conclusions of Law**

2
3 Based on the foregoing analysis, and in accordance with OAR 345-022-0090(2), the Council
4 imposes conditions to address the protection of historic, cultural, and archaeological resources
5 at the facility site.
6

7 **IV.L. Recreation: OAR 345-022-0100**

8
9 *(1) Except for facilities described in section (2), to issue a site certificate, the Council must*
10 *find that the design, construction and operation of a facility, taking into account*
11 *mitigation, are not likely to result in a significant adverse impact to important*
12 *recreational opportunities in the analysis area as described in the project order. The*
13 *Council shall consider the following factors in judging the importance of a recreational*
14 *opportunity:*
15

- 16 *(a) Any special designation or management of the location;*
17 *(b) The degree of demand;*
18 *(c) Outstanding or unusual qualities;*
19 *(d) Availability or rareness;*
20 *(e) Irreplaceability or irretrievability of the opportunity.*

21 ***235

22
23 **Findings of Fact**

24
25 The analysis area for impacts to recreational opportunities is the area within and extending 5
26 miles from the proposed site boundary, except for the proposed 230 kV transmission lines
27 where the analysis area is only the area within the site boundary.
28

29 **Applicant's Methods for Identifying Recreational Opportunities within Analysis Area**

30
31 Jurisdictions within the analysis area include cities of Echo, Hermiston and Stanfield; and
32 Morrow and Umatilla counties. As presented in ASC Exhibit T, the following federal, state and
33 local sources were reviewed to identify potential recreational opportunities within the analysis
34 area:
35

- 36 • Bureau of Land Management's (BLM) 2018 Explore Your Public Lands, BLM Recreation
37 Web Map
38 • BLM's 1989 Baker Resource Management Plan Record of Decision, Rangeland Program
39 Summary (RPS)
40 • Oregon Department of Fish and Wildlife's (ODFW) 2018 Oregon Hunting Map website

²³⁵ OAR 345-022-0100(2) applies to facilities that qualify as a special criteria facility under OAR 345-0015-0310; the proposed facility does not qualify and therefore OAR 345-022-0100(2) is not applicable.

- National Park Service’s Management and Use Plan Update and Final Environmental Impact Statement, Oregon National Historic Trail and Mormon Pioneer National Historic Trail
- Oregon Parks and Recreation Department’s (OPRD) 2018 Find a State Park interactive mapper
- Oregon Department of Transportation’s 2018 Scenic Byway webpage
- City of Echo’s government website for local attractions
- Pendleton, Oregon’s Horseshoe Curve Hunt Club website

As established in the Amended Project Order, if significant adverse impacts from the facility could occur to important recreational opportunities beyond the analysis area or to resources identified after issuance of the draft proposed order, the applicant is obligated to assess those impacts.

IV.L.1. Recreational Opportunity Importance Assessment

ASC Exhibit T identifies seven recreational opportunities within the analysis area, as presented in Table 17: *Recreational Opportunities within the Analysis Area and Distance from Proposed Micrositing Area*. The applicant considers one recreational opportunity, Fort Henrietta Park, to be important. Based on the evaluation presented below, the Council’s findings of fact to support Council evaluation that three total recreational opportunities be considered important – Echo Meadows Interpretive Site, Corral Springs ONHT viewing site and Fort Henrietta Park.

**Table 17: Recreational Opportunities within the Analysis Area
and Distance from Proposed Micrositing Area**

Recreational Opportunity	Distance from Micrositing Area (miles) ¹			Department Recommendation of Whether Recreational Opportunity is “Important” ²
	Transmission Line	Wind	Solar	
Echo Meadows Interpretive Site	0.2	6.4	> 5	Yes
Corral Springs Oregon National Historic Trail (ONHT) Viewing Site	0.4	2.0	> 3	Yes
Fort Henrietta Park/ONHT site	2.7	> 5	> 8	Yes
F.T. George Park	2.8	> 5	> 8	No
Horseshoe Curve Hunt Club	> 3	2.0	> 3	No
Oregon Trail Arboretum	3.1	> 5	> 8	No
Echo Hills Golf Club	3.2	> 5	> 8	No
Notes: 1. Distances were derived by the Department, based on review of ASC Exhibit T Figure T-1 and ASC Exhibit C Figure C-4. 2. Per OAR 345-022-0100(1), to determine whether an impact assessment is required under this standard, Council must first evaluate the applicant’s assessment of whether the identified recreational opportunities are “important” based on the following factors: <i>(a) Any special designation or management of the location;</i>				

**Table 17: Recreational Opportunities within the Analysis Area
and Distance from Proposed Micrositing Area**

Recreational Opportunity	Distance from Micrositing Area (miles) ¹			Department Recommendation of Whether Recreational Opportunity is “Important” ²
	Transmission Line	Wind	Solar	
<i>(b) The degree of demand;</i> <i>(c) Outstanding or unusual qualities;</i> <i>(d) Availability or rareness;</i> <i>(e) Irreplaceability or irretrievability of the opportunity.</i>				

Echo Meadows Interpretive Site

Echo Meadows Interpretive Site is a 320-acre, BLM-designated high-potential site and Oregon Trail Area of Environmental Concern (ACEC) (special designation), located in the City of Echo, approximately 0.2-miles from the site boundary of the proposed 230 kV UEC Cottonwood transmission line.²³⁶ The Echo Meadows Interpretive Site contains interpretive panel kiosks, nearly 1-mile of visible Oregon Trail ruts and ½-mile hiking path with overlook of wagon ruts and local wildlife (unusual qualities, rare and irreplaceable).²³⁷ The degree of demand is assumed by the Department to be moderate to high because of its historic and recreational significance.

Based on these facts, the Council finds that the Echo Meadows Interpretive Site has a special designation as an ACEC; has unusual qualities (visible Oregon trail ruts); is irreplaceable (Oregon trail ruts); and, has a moderate degree of demand (due to its special designation). For these reasons, the Council finds that the Echo Meadows Interpretive Site is an important recreational opportunity.

Corral Springs ONHT Viewing Site

The Corral Springs ONHT viewing site is a 5-acre National Historic Oregon Trail Site, located on private land, but open to the public at landowner discretion, in the City of Echo, approximately 0.4-miles from the site boundary of the proposed BPA Stanfield 230 kV transmission line; and, approximately 2 miles from the closest micrositing area of proposed wind facility components (the solar micrositing area is at a greater distance than either of these referenced components). The Corral Springs ONHT viewing site provides views of 0.25-miles of intact wagon ruts.

²³⁶ An analysis of potential impacts from the proposed transmission line is presented in this section, based on the Council’s finding that the resource be considered an “important” recreational opportunity. As stated in the Amended Project Order, the analysis area for the transmission line is the area within the site boundary, unless there are resources identified outside of the site boundary that could be impacted, which would necessitate an evaluation under the standard.

²³⁷ Information obtained by the Department from the City of Echo’s Attractions. Available: <https://echo-oregon.com/attractions/> Accessed: 2022-02-11.

1 The Council finds that the resource is important for the following reasons.²³⁸ First, the Council
2 finds that the ONHT designation is a special designation. Second, the Council finds that, while
3 the applicant has identified several other ONHT locations within the analysis area, “most trail
4 segments have been destroyed by agricultural use” and “access to remaining trail evidence is
5 limited”.²³⁹ Therefore, the Council finds that Corral Springs ONHT viewing site (i.e. locations of
6 intact wagon ruts) represents a resource that has unusual qualities, is rare, is limited in
7 availability and is irreplaceable.

8 9 Horseshoe Curve Hunt Club

10
11 The Horseshoe Curve Hunt Club is a 650-acre, privately-owned, ODFW-licensed hunting
12 preserve and lodge, located 2-miles from the closest microsite area of proposed (wind) facility
13 components (the solar microsite area is at a greater distance than either of these referenced
14 components). It is one of a few private hunting areas in the region. Because this resource is
15 privately owned and accessible only via fee-payment, the Council finds that the degree of
16 demand is low. Because it is not free to the public, with low demand and without any special
17 designation, the Council finds that the Horseshoe Curve Hunt Club is not an important
18 recreational opportunity under the standard.

19 20 Fort Henrietta Park/ONHT Site

21
22 The Fort Henrietta Park/ONHT site is a 2-acre, city park, designated as an ONHT site, located in
23 the City of Echo, approximately 2.7-miles from the site boundary of the proposed 230 kV UEC
24 Cottonwood transmission line²⁴⁰; and more than 5 miles from the proposed wind microsite
25 area (the solar microsite area is at a greater distance than either of these referenced
26 components). The Fort Henrietta Park ONHT site provides RV parking, camping, a playground,
27 skate park, an ONHT campsite and river crossing, and replica frontier-era blockhouse.

28
29 Based on the above-described facts, the Council finds that Fort Henrietta Park/ONHT site be
30 considered an important recreational opportunity because of its special management as a
31 municipal park; and, specific components of the park including the ONHT campsite and river
32 crossing, and replica frontier-era blockhouse are unusual, irreplaceable and rare qualities.

33 34 F.T. George Park

²³⁸ As presented in ASC Exhibit T, the applicant proposes that Corral Springs ONHT viewing site not be considered an important recreational opportunity because: the site has not been identified by BLM as a high-potential ONHT site and therefore has no special designation; demand is assumed to be low because the site has a small capacity and is not located on a high-volume travel route; and, it is not rare because there are multiple other locations in the vicinity (such as Echo Meadows, Well Spring, and Fourmile Canyon) with Oregon Trail ruts, interpretive information, and defined public access.

²³⁹ NHWAPPDoc2-19 ASC Exhibit T. Recreation_2022-01-31 Page 11 of 21, Table T-1.

²⁴⁰ As stated in the Amended Project Order, the analysis area for the transmission line is the area within the site boundary, unless there are resources identified outside of the site boundary that could be impacted, which would necessitate an evaluation under the standard.

1
2 F. T. George Park (often referred to as George Park) is a small (less than one acre) facility,
3 located within the City of Echo, approximately 2.8-miles from the site boundary of the
4 proposed 230 kV UEC Cottonwood transmission line. F.T. George Park includes landscaping, a
5 gazebo, rose garden, pond and waterfall, and picnic facilities. These features are not rare and
6 are replaceable. Based on these facts, the Council finds that F.T. George Park is not considered
7 an important recreational opportunity because of its replaceable and common features.
8

9 Oregon Trail Arboretum

10
11 The Oregon Trail Arboretum is a small (less than one acre) property, within the City of Echo,
12 approximately 3.1 miles from the site boundary of the proposed 230 kV BPA Stanfield
13 transmission line. The resource provides a diverse collection (approximately 100) of ornamental
14 trees and shrubs with interpretive panels of species name. These features are not rare and are
15 replaceable. Based on these facts, the Council finds Oregon Trail Arboretum is not considered
16 an important recreational opportunity because of its replaceable and common features.
17

18 Echo Hills Golf Club

19
20 The Echo Hills Golf Club is a 50-acre, municipal 9-hole golf course with a pro shop, snack bar,
21 driving range, and cart rentals, located in the City of Echo,²⁴¹ approximately 3.2 miles from the
22 site boundary of the proposed 230 kV transmission routes. These features are not rare and are
23 replaceable. Based on these facts, the Council finds that Echo Hills Golf Club is not considered
24 an important recreational opportunity because of its replaceable and common features.
25

26 IV.L.2. Impact Assessment

27 28 IV.L.2.a. Potential Direct or Indirect Loss of Important Recreational Opportunity

29 30 *Direct Loss*

31
32 A direct loss to an important recreational opportunity would occur when construction or
33 operation of the facility would impact a recreational opportunity by directly altering the
34 resource so that it no longer exists in its current state. The facility will not cross or be located
35 within any important recreational opportunity. Therefore, the facility will not physically disturb,
36 or result in ground disturbance, to any important recreational opportunity, and would also not
37 require any temporary or permanent closure or removal of the important recreation
38 opportunities to public use. For these reasons, and upon review of the location and proximity of
39 important recreational opportunities to the facility site, the Council finds that the facility will
40 not result in any direct impacts to the three identified important recreational opportunities.
41

42 *Indirect Loss*

²⁴¹ NHWAPPDoc2-19 ASC Exhibit T. Recreation_2022-01-31. Page 11 of 21, Table T-1.

Similar to the assessment of direct loss, indirect loss would result if construction or operation of the facility would impact a recreational opportunity by indirectly altering the resource or some component of it. To evaluate indirect loss resulting from the construction and operation of the facility, the Department considers potential noise, traffic and visual impacts to the above mentioned important recreational opportunities.

IV.L.2.b. Potential Noise Impacts at Important Recreational Opportunities

The Department's evaluation of the applicant's construction-related noise impact assessment is presented in Section IV.F.1. *Potential Noise Impacts at Protected Areas* and is incorporated here by reference.

Construction Noise

Echo Meadows Interpretive Site

Echo Meadows Interpretive Site is located approximately 0.2-miles from the site boundary of the proposed 230 kV UEC transmission line, and over 3 miles from proposed wind or solar microsites. Based on the Department's review of Google Earth, the parking lot area and first set of interpretive signs are less than 1,000 feet away. The applicant estimated a daily average noise level, in L_{eq} , of 48 dBA at 2,000 feet. Because the parking lot and first set of interpretive signs appear to be half the distance used by the applicant to assess the L_{eq} composite noise level for construction, the Department estimates the L_{eq} based on half the distance, using the accepted 3-dBA increase per halving of distance, at 51 dBA. Based on ASC Exhibit X Table X-1, a noise level of 51 dBA would be similar to a quiet rural residence or light auto traffic at a distance of 100-feet.

Facility construction noise of 51 dBA could impact the quality of visitor experience at the Echo Meadows site. Therefore, the Council imposes a condition requiring that, prior to construction of the 230 kV UEC Cottonwood transmission line, if selected, that the applicant notify the BLM land manager of the construction schedule and potential noise impacts in efforts to alert potential visitors and minimize potential noise disturbance impacts at the Echo Meadows site (see Protected Areas Condition 1 and 2).

Based upon compliance with the above referenced conditions, the Council finds that facility construction noise would not be likely to result in significant adverse impacts at the Echo Meadows Interpretive Site.

Corral Springs ONHT Site

Corral Springs ONHT site is located approximately 0.4-miles (2,112 feet) from the site boundary of the proposed BPA Stanfield transmission line, and over 2 miles from proposed wind or solar microsites. At 2,000 feet, estimated construction noise (in L_{eq}) is 48 dBA. Construction

1 noise could be louder if a helicopter is used to span the transmission line over the Umatilla
2 River, ranging from 62 to 84 dBA at 1,000 feet.²⁴² Based on ASC Exhibit X Table X-1, a noise level
3 of 48 dBA would be similar to a quiet rural residence or light auto traffic at a distance of 100-
4 feet; a noise level of 84 dBA would be loud, similar to a motorcycle at 25 feet. Based on review
5 of ASC Exhibit C Figure C-4.9, there is limited vegetation or topographic screening between
6 construction areas and the resource. Therefore, facility construction noise of 48 to 84 dBA
7 could impact the quality of visitor experience at the Corral Springs ONHT Site. The Council
8 imposes a condition requiring that, prior to construction of the 230 kV BPA Stanfield
9 transmission line, if selected, that the applicant notify the landowner of the construction
10 schedule and potential noise impacts in efforts to alert potential visitors and minimize potential
11 noise disturbance impacts at the Corral Springs ONHT site during construction.

12
13 **Recreation Condition 1 (PRE):** Prior to construction of the 230 kV BPA Stanfield
14 transmission line, if selected as the final design transmission line option, the certificate
15 holder shall provide notice to the Department and landowner for the Corral Springs
16 ONHT site of the 230 kV BPA Stanfield transmission line construction schedule, potential
17 construction-related noise impacts, and contact information to report noise complaints.
18 [PRE-RC-01]

19
20 **Recreation Condition 2 (CON):** During construction of the 230 kV BPA Stanfield
21 transmission line, if selected as the final design transmission line option, the certificate
22 holder shall require contractors to have noise complaint and response signage on or
23 near their equipment in a manner accessible to users of the Corral Springs ONHT site. If
24 noise complaints are received, contractors must attempt to reduce equipment-related
25 noise levels, to the extent practicable.
26 [CON-RC-01]

27
28 Based upon compliance with the above-referenced conditions, the Council finds that facility
29 construction noise would not be likely to result in significant adverse impacts at the Corral
30 Spring ONHT site.

31 Fort Henrietta Park/ONHT Site

32
33 Fort Henrietta Park/ONHT site is located approximately 2.7-miles (14,256 feet) from the site
34 boundary of the proposed transmission line routes, and over 5 miles from proposed wind or
35 solar micro-siting areas. Composite construction noise level (L_{eq}) at 2,000 feet is estimated at 48
36 dBA.²⁴³ Using this noise level and accounting for noise attenuation of 3 dBA per doubling of
37 distance, noise from facility construction would be faint, similar to a bedroom or quiet living
38 room, at this recreational opportunity. User experience would not be expected to be
39 significantly impacted from a faint noise level of approximately 39 dBA at an over 2 mile
40

²⁴² Helicopter noise level obtained from 2017 Helicopter Association International.

²⁴³ NHWAPPDoc2-23 ASC Exhibit X Noise_2022-01-31. Page 9-10 of 46, Table X-1.

1 distance. For these reasons, the Council finds that facility construction noise will not be likely to
2 result in significant, adverse impacts at the Fort Henrietta Park/ONHT site.

3 4 *Operational Noise*

5
6 As presented in Table 17 above, the nearest recreational opportunity to facility infrastructure
7 would be the BLM's Echo Meadows site²⁴⁴, approximately 1,056 feet (0.2 miles) from the
8 proposed 230 kV UEC Cottonwood transmission line. Therefore, the potential for facility noise
9 impacts may occur from corona noise generating from the proposed 230 kV transmission line
10 during rainy conditions. Based on ASC Exhibit X Figure X-1, corona noise impacts are estimated
11 at 35 dBA at 200 feet. At a distance of 1,000-feet, based on noise attenuation of 3 dBA per
12 doubling of distance, noise levels are expected to range from 27 to 30 dBA during rainy
13 conditions, and below 26 dBA (accepted ambient noise levels) during fair conditions. As
14 presented in ASC Exhibit X Table X-1, noise levels ranging from 25-30 dBA are considered
15 extremely quiet, similar to a quiet library at 15 feet. User experience would not be expected to
16 be significantly impacts from extremely quiet, corona noise impacts of 27 to 30 dBA at a
17 distance of over 1,000-feet.

18
19 Acoustic modeling results for all facility components identify a maximum noise level of 38 dBA
20 within 200-feet. Using this noise level, at a distance of 0.4-miles and noise attenuation of 3 dBA
21 per doubling of distance, noise from facility operation at the Corral Spring ONHT site and Fort
22 Henrietta Park/ONHT site would not be audible. For these reasons, the Council finds that facility
23 operational noise would not be likely to result in significant, adverse impacts at any important
24 recreational opportunity within the analysis area.

25 26 IV.L.2.c. Potential Traffic Impacts at Important Recreational Opportunities

27 28 *Construction Traffic*

29
30 Access to the Echo Meadows site is via Oregon Trail Road (OR-320), which is a route that would
31 be used during facility construction. Traffic impacts to the Echo Meadows site include
32 temporary (15 minutes) closure of the gravel road going north from OR-320; temporary closure
33 of OR-320 for 1-2 days; and congestion from helicopter use for the I-84 crossing.

34
35 Access to the Corral Springs ONHT site is via CR-1300 in the City of Echo.²⁴⁵ CR-1300 is not
36 identified in ASC Exhibit U Figure U-1 (Transportation Routes) as a primary transportation route
37 associated with facility construction. However, CR-1300 intersects with the proposed 230 kV
38 BPA Stanfield transmission line route; therefore, construction related traffic impacts could
39 occur on CR-1300, if this route is selected at final facility design.

²⁴⁴ The Echo Meadows site is a 320 acre site managed for the preservation and enjoyment of the remaining evidence of the Oregon Trail.

²⁴⁵ City of Echo Webpage, Attractions – Description of Corral Springs ONHT Site at: <https://echo-oregon.com/attractions/> Accessed by the Department on March 27, 2022.

Access to Fort Henrietta Park/ONHT site is provided via Lexington Echo Highway to Main Street from the west, and via N. Thielson to Main Street from the north. Both the Lexington Echo Highway and N. Thielson (which becomes CR-1300) could be used during facility construction, given the location of the roads, which either intersect or parallel, the proposed 230 kV transmission line routes.

Facility construction could result in up to 1,034 light- and heavy-duty one-way trips per day; and 2,068 round trips per day on any of the above-referenced access roads. Construction-related traffic impacts would be minimized through implementation of numerous best management practices (BMPs), including:

- Coordinating the timing and locations of road closures or oversize load movements in advance with emergency services such as fire, paramedics, and essential services such as mail delivery and school buses.
- Maintaining emergency vehicle access to private property.
- Posting signs on county- and state-maintained roads, where appropriate, to alert motorists of construction and warn them of slow, merging, or oversize traffic.
- Using traffic control measures such as traffic control flaggers, warning signs, lights, and barriers during construction to ensure safety and to minimize localized traffic congestion. These measures would be required at locations and during times when trucks would be entering or exiting highways frequently.
- Notifying landowners prior to the start of construction near residences, including helicopter use within one mile of residences.
- Restoring residential areas as soon as possible, and fencing construction areas near residences at the end of the construction day.

These BMPs have been incorporated into a draft Construction Traffic Management Plan and are required by Council to be finalized, based on final facility design, construction methods and haul routes, and imposed in Public Services Conditions 1 and 2. Based on compliance with the requirements of Public Services Conditions 1 and 2, the Council finds that construction-related traffic impacts would not be likely to result in significant, adverse impacts at the three important recreational opportunities within the analysis area.

Operational Traffic

Routine O&M of the facility could include equipment deliveries with oversized haul trucks, but generally is anticipated to result in a maximum of 30 daily, one-way light-duty vehicle trips. The Council finds that this level of traffic increase will not be likely to result in significant, adverse impacts at any important recreational opportunity within the analysis area because the primary and local routes have sufficient capacity to accept this increase in volume without impacting the quality of traffic service.²⁴⁶

²⁴⁶ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 20 of 231, Table U-5.

1
2 IV.L.2.d. Potential Visual Impacts at Important Recreational Opportunities

3
4 Visibility impacts from temporary vegetation loss from construction and permanent facility
5 structures during operations were evaluated. The facility does not include combustion or
6 thermal heat sources; therefore, the facility will not result in plumes or visible air emissions.
7

8 *Construction-Related Visibility*
9

10 Visibility impacts from vegetation loss are based on amount of disturbance and distance from
11 disturbance. The facility will result vegetation loss including 2,079 acres of temporary
12 disturbance. The most substantial vegetation loss will be from construction of the wind and
13 solar facility components. Based on a distance greater than 2 miles from wind and solar facility
14 components to any of the important recreational opportunities, temporary vegetation loss will
15 not be discernable.
16

17 The vegetation loss from construction and operation of the proposed UEC Cottonwood
18 transmission line at the closest recreational opportunity - Echo Meadows site - will not be
19 distinguishable given the limited amount of disturbance that will occur for placement of
20 structures, combined with the existing viewshed which includes cropland, grassland, shrubs and
21 an existing transmission line. Based on these facts, the Council finds that visual impacts from
22 temporary vegetation loss will not be likely to result in a significant adverse impact to the Echo
23 Meadows Interpretive Site.
24

25 *Operational-Related Visibility*
26

27 The Department's evaluation of the applicant's visual impact assessment is presented in Section
28 IV.F.5. *Potential Visual Impacts at Protected Areas* and is incorporated here by reference.
29

30 Echo Meadows Interpretive Site
31

32 The ZVI analysis demonstrates that, at the Echo Meadows ACEC, the proposed 230 kV UEC
33 Cottonwood transmission line route (0.2 mile) would be visible at a foreground viewing
34 distance and wind turbines would be visible at a variable visibility at a background viewing
35 distance (6.4 miles or more). In ASC Exhibit R Figure R-6, the applicant provides photo
36 simulations of the proposed 230 kV UEC transmission line route from the Echo Meadows site.
37 These simulations demonstrate the existing viewshed as inclusive of wind turbines (from other
38 facilities), existing UEC and other power lines, agricultural structures, and multiple center-pivot
39 agricultural irrigation systems. The photo simulation also demonstrates that the proposed 230
40 kV UEC transmission line route would not be visible when visitors are oriented toward the
41 remnant Oregon Trail ruts. However, where not screened by topography, the proposed
42 transmission line would introduce new, moderately contrasting middle-ground and background
43 features in the viewshed of Echo Meadows.
44

1 Based on review of the applicant's ZVI analysis and photo simulation, consideration of the
2 existing viewshed, and BLM comments affirming that visibility of the transmission line would
3 not be expected to impact user experience²⁴⁷, the Council finds that facility visibility will not
4 impact the use or enjoyment of the resource by the public and therefore would not be likely to
5 result in a significant adverse impacts to the Echo Meadows site.

6 7 Corral Springs ONHT Site and Fort Henrietta Park/ONHT Site

8
9 The ZVI analysis demonstrates that, at the Corral Springs ONHT Site and Fort Henrietta
10 Park/ONHT Site, the proposed 230 kV BPA Stanfield transmission line (0.4 mile) would be visible
11 at a foreground viewing distance and wind turbines would be highly visible (61-90 and 91-112
12 turbines) at a background viewing distance (2.0 miles or more). Based on review of Google
13 earth imagery, the surrounding area is inclusive of agriculture, bridges, roads and existing
14 transmission line infrastructure. Given that the existing viewshed of the proposed 230 kV
15 transmission lines includes existing transmission lines, and the broader viewshed includes
16 agricultural and urban development, visibility of facility structures will not be expected to
17 significantly impact the use or enjoyment of the resource by the public or the resource itself.
18 For these reasons, the Council finds that visibility of facility structures will not be likely to result
19 in significant adverse impacts to the Corral Springs ONHT site or Fort Henrietta Park/ONHT site.

20 21 Conclusions of Law

22
23 Based on the foregoing findings of fact, reasoning and analysis, and subject to compliance with
24 the site certificate conditions, the that the Council finds that the facility complies with the
25 Council's Recreation standard.

26 IV.M. Public Services: OAR 345-022-0110

27
28 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
29 *Council must find that the construction and operation of the facility, taking into account*
30 *mitigation, are not likely to result in significant adverse impact to the ability of public*
31 *and private providers within the analysis area described in the project order to provide:*
32 *sewers and sewage treatment, water, storm water drainage, solid waste management,*
33 *housing, traffic safety, police and fire protection, health care and schools.*

34
35 *(2) The Council may issue a site certificate for a facility that would produce power from*
36 *wind, solar or geothermal energy without making the findings described in section (1).*
37 *However, the Council may apply the requirements of section (1) to impose conditions on*
38 *a site certificate issued for such a facility.*

39 * * *

²⁴⁷ NHWAPPDoc3-12 pASC BLM comment Protected Areas impacts Echo Meadows Woolf 2021-04-30. BLM's Outdoor Recreation Planner Brian Woolf stated the that proposed transmission line would be in "conformance with the BLM's visual resource zoning for that viewshed."

1 The Council's Public Services standard requires the Council to find that the proposed facility is
2 not likely to result in significant adverse impacts on the ability of public and private service
3 providers to supply sewer and sewage treatment, water, stormwater drainage, solid waste
4 management, housing, traffic safety, police and fire protection, health care, and schools. The
5 standard may take into consideration mitigation measures to reduce potential impact to a
6 public or private service provider.²⁴⁸ Pursuant to OAR 345-022-0110(2), the Council may issue a
7 site certificate for a facility that would produce power from solar energy without making
8 findings regarding the Public Services standard; however, the Council may impose site
9 certificate conditions based upon the requirements of the standard.

11 **Findings of Fact**

13 The analysis area for potential impacts to public services from construction and operation of
14 the facility is the area within and extending 10-miles from the site boundary. Based on the
15 analysis area, the following evaluation assesses potential impacts to public and private
16 providers within Umatilla County and Morrow County, and the cities of Hermiston, Stanfield,
17 Echo, Pendleton, and Pilot Rock. These two counties and five cities are all reviewing agencies
18 and have been provided notification throughout the review process and their comments have
19 been requested.²⁴⁹ Additionally, Umatilla County is the Council appointed Special Advisory
20 Group (SAG), discussed further in Section IV.E., *Land Use*.

22 *Important Assumptions used in Applicant's Impact Assessment*

24 Important assumptions relied upon by the applicant to evaluate potential impacts from facility
25 construction and operation to private and public service providers are summarized below:

27 *Construction Assumptions*

- 29 • The applicant anticipates construction of the facility to take 18 months to two years,
30 however, the applicant requests and the Council finds that facility construction will
31 begin within three years after the site certificate is executed/date of Council action and
32 that construction of all facility components shall be completed within three years after
33 construction commencement.

²⁴⁸ OAR 345-001-0010(33) "Mitigation" means taking one or more of the following actions listed in order of
priority:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action;
(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
(c) Partially or completely rectifying the impact by repairing, rehabilitating or restoring the affected environment;
(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the
action by monitoring and taking appropriate corrective measures;
(e) Partially or completely compensating for the impact by replacing or providing comparable substitute resources
or environments; or
(f) Implementing other measures approved by the Council.

²⁴⁹ OAR 345-001-0010(51)(p).

- The facility may be constructed in phases, or by facility component or related or supporting facility.
- Most temporary workers are expected to be on site for approximately 6-18 months and not expected to permanently relocate with their families.
- Up to 234 one-way delivery truck trips per day during construction, and up to 800 one-way private vehicle trips per day to bring workers to the facility site (see Section IV.M.5. *Traffic Safety*, in this Section).

Construction Labor Force

The applicant explains that the average number of construction workers on site would be 140 people, while the maximum number of workers during peak construction months would be approximately 500 people. The applicant assumes that 70 percent (98 workers during average construction periods and 350 workers during peak construction) of the workforce would be from out of state and would temporarily relocate to the vicinity of the facility for the 6–18-month construction timeframe. The applicant explained that the remaining 30 percent of workers will be hired locally which in ASC Exhibit U, means from Oregon and Umatilla County, while ASC Exhibit K (Land Use), focuses on local employment being from Umatilla County. The Department anticipates that a larger portion of the 70 percent of workers that would relocate temporarily to the vicinity of the facility will be from Oregon more generally, including Portland, rather than arriving from out of state. However, the Council considers local employment to mean hiring of personnel who live in Umatilla County and not from Oregon in its entirety. Umatilla County includes the communities of Pendleton, Hermiston, Stanfield, Umatilla, Echo, and Pilot Rock.

Based on the 30 percent of locally hired personnel, this will be 42 workers during average construction periods and 150 workers during peak construction summer months. The applicant explained that this is a conservative estimate because and referenced the 2018 National Solar Jobs Census, published by the Solar Foundation, which profiles a construction firm that provides Engineering, Procurement, and Construction contracting services for utility-scale PV solar projects, typically performs about 1 million labor hours for solar projects, and 60 percent of the total work performed is done by direct hires from local communities.²⁵⁰ The report continues by explaining that to achieve the 60 percent locally hired workforce, they partner with local workforce development organizations to help coordinate job fairs around the community. The same 2018 report provides examples of other large solar energy companies who hire up to 90% of the workforce from local communities.²⁵¹ It is possible that some of these workers may be employed by local subcontractors who may be hired to assist with dump and water truck deliveries, flaggers, aggregate suppliers and pavers.

²⁵⁰ NHWAPDoc2-10 ASC Exhibit K. Land Use_2022-01-31. Page 84-101 of 158, Section 7.1.

²⁵¹ Swinerton Renewable Energy. National Solar Jobs Census 2018, NATIONAL SOLAR JOBS CENSUS 2018. Solar-Jobs-Census-2018-1-1. Available: <https://irecusa.org/wp-content/uploads/2021/07/Solar-Jobs-Census-2018-1-1.pdf>. Accessed and downloaded on 03-29-2022. The Department also reviewed the 2020 Solar Job Census, however, that report focused largely on impacts to the industry from the COVID-19 pandemic.

Based upon the Department's review of applicant referenced materials and the Department's understanding of large construction projects, the Department concurs that the applicant's assumption of 30 percent (42 workers during average construction periods and 150 workers during peak construction summer months) of the work force will be hired locally from the communities of Umatilla County. This leaves 70 percent (98 workers during average construction periods and 350 workers during peak construction) of the workforce that will relocate temporarily or commute longer distances to the facility site boundary. It's anticipated that the 70 percent will be made up of out of state works as well as workers from other areas in Oregon.

Operation Assumptions

- Approximately 10-15 operational personnel expected to be permanently employed to operate the proposed wind and solar facility.
- Up to 10 personnel estimated to relocate from outside the analysis are to work at the facility site.
- Life of the proposed facility will be 30 years.

IV.M.1. Sewers and Sewage Treatment

Construction and operation of the facility will generate sanitary waste. The facility will not rely on or require use of existing public or private sewer system or connection to a sewage treatment facility, other than to have the licensed contractor dispose of sanitation waste. As discussed in ASC Exhibit U and V, all sanitation waste generated during construction would be managed via portable toilets which would be managed by a licensed subcontractor, who would be responsible for servicing the toilets at regular intervals, transporting, and disposing of wastewater in accordance with local and jurisdictional regulations.²⁵²

The applicant proposes to install an on-site septic system that would be located within and serve the O&M building during operations. The applicant's third-party contractor would obtain an On-site Sewage Disposal Construction Installation Permit for the septic system from the Oregon Department of Environmental Quality (DEQ) Eastern Region office in Pendleton.²⁵³ As discussed in Section IV.B., *Organizational Expertise* and ASC Exhibit E, the permit for an on-site sewage septic tank is mostly ministerial and non-discretionary. However, Organizational Expertise Condition 7, requires that the applicant provide written confirmation that its third-party contractors obtained On-site Sewage Disposal Construction Installation Permit from DEQ prior to construction of the facility.

Because the facility does not connect to any public or private sewers or sewage treatment facilities, and sanitary waste associated with construction and operation would be addressed

²⁵² NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 8 of 231; NHWAPDoc2-21 ASC Exhibit V. Waste_2022-01-31 Page 10-13 of 18.

²⁵³ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31.

1 with licensed portable toilet providers and a permitted on-site septic system, the Council finds
2 that the facility will not be likely to result in significant adverse impacts to public and private
3 supplies of sewers and sewage treatment.

4 5 IV.M.2. Water Services 6

7 ASC Exhibit U and O identify public water service providers that would supply water for
8 construction of the facility, the applicant did not identify any private water service providers.
9 The public entities that will supply water for the facility construction are the cities of Pendleton,
10 Hermiston and Echo Water Departments.

11
12 Construction of the facility could result in impacts to public or private water service providers if
13 the water needed to serve the facility would impact their ability to provide water to their
14 customers. Construction of the facility will use approximately 71 million gallons (Mgal) under
15 average conditions and up to 100 Mgal of water under worst-case hot and dry weather
16 conditions. Table 27: *Construction Period and Daily Worst-Case Construction-Related Water Use*
17 as presented in Section IV.Q.3., *Water Rights*, also breaks down the construction-related water
18 usage into annual and daily totals under worst-case, dry, circumstances. The primary uses for
19 water would be for dust suppression, concrete mixing for foundations, road construction, and
20 some water used for fire prevention.²⁵⁴

21
22 Dust associated with construction of the facility will be generated from heavy equipment used
23 for site preparation, moving construction materials, worker transportation in and out of the site
24 and transportations within the construction site areas. Dust generation would be created and
25 aggravated by the removal of topsoil and vegetation, grading for foundation placement and
26 construction of roads, transmission lines and other related or supporting facilities. As discussed
27 in ASC Exhibit O, to reduce fugitive dust water trucks would patrol the work site as often as one
28 pass per hour, wetting down disturbed and exposed soils. Should construction occur in a
29 particularly dry year, the water required for dust control during construction could increase
30 from 58 Mgal to an estimated 87.5 Mgal, increasing the total water requirement for all
31 construction uses to approximately 100 Mgal.²⁵⁵ As noted above, Section IV.Q.3. *Water Rights*;
32 Table 27: *Construction Period and Daily Worst-Case Construction-Related Water Use*, outlines
33 the estimated water consumed for each construction-related activity under average and worst-
34 case conditions.

35
36 Concrete foundations would be required for each turbine, meteorological towers, the
37 substations, O&M building, BESS, solar inverter and transformer pads and, for the ASC, the
38 applicant assumes that the solar racking posts would need concrete footings, although that
39 may not be necessary. Concrete mixing for foundations would require approximately 2.2 million
40 gallons of water, and as noted in ASC Exhibit O Table O-2, the amount of water necessary for
41 concrete mixing would not vary based on a worst case, dry season. Similarly, the applicant

²⁵⁴ NHWAPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 5-6 of 17.

²⁵⁵ NHWAPDoc2-14 -ASC Exhibit O. Water Req_2022-01-31. Pages 7-9 of 17.-

1 indicates that there would not be a difference in the estimated water used for road
2 construction between average and worst-case conditions for a total of approximately 10.5 Mgal
3 of water. Water may also be used for fire prevention, which would involve stationing a water
4 truck at the job site to keep the ground and vegetation moist to be prepared for extreme fire
5 conditions.

6
7 The applicant or its third-party contractor would obtain water for construction of the facility
8 from the City of Hermiston, the City of Pendleton, and the City of Echo, who each
9 have indicated willingness and ability to supply water for construction as evidenced by letters
10 provided in ASC Exhibit O, Attachment O-1. In Attachment O-1, the City of Hermiston confirmed
11 that it could provide up to 125,000 gallons per day up to 68 million gallons for facility
12 construction. The City of Echo also provided a letter stating they could provide up to 125,000
13 gallons per day (with no limit stated) for the construction of the facility. In a March 2022 memo
14 responding to a Department inquiry, the City of Echo confirmed its ability to supply water for
15 the construction of the proposed facility under existing water rights, stating that; "...Echo's
16 current water supply wells could meet the average and worst-case water use scenarios
17 proposed by the Nolin Hills project during a typical peak summer month period."²⁵⁶ The City of
18 Pendleton's 2020 letter included in ASC Exhibit O confirmed the ability to provide 134,000
19 gallons per day up to 71,000,000 gallons for construction. The City of Pendleton also affirmed
20 its ability to supply water for the construction of the facility under existing water rights in a
21 response received by the Department in February 2022.²⁵⁷ Because the applicant or its third
22 party contractor will obtain water for construction of the facility from one or more of the public
23 water service providers listed above, the Council finds that the responses from the City Water
24 Departments are sufficient to demonstrate that it is not likely that the facility construction will
25 adversely impact any of these service providers.

26
27 The applicant explains that operational use of water will include solar module/panel washing
28 which will occur approximately once a year and use approximately 1.12 Mgal per year.²⁵⁸ Other
29 operational water use will occur from use of the O&M building and this water will be obtained
30 from an on-site well. Operational water for solar panel washing will be purchased and trucked
31 in from the City of Hermiston, Pendleton, and/or Echo. The letters included in ASC Exhibit O and
32 in response to Department inquiries, listed above, indicate that these municipalities will be able
33 to provide the annual water needed to wash solar panels. Further, Water Rights Condition 1
34 and 2 in Section IV.Q.3., *Water Rights*, will require the applicant to verify total water usage
35 needs for construction and that the applicant provide verification of agreements with any water
36 service provider verifying their ability to legally provide water for identified purposes. Water
37 obtained from the on-site well will not impact any water service providers during operation,
38 however, Water Rights Condition 3 requires the same information be submitted to verify that
39 water for solar panel washing or other operational activities can be supplied by one or more or
40 the water service providers and Water Rights Condition 4 applies to the on-site well.

²⁵⁶ NHWAPDoc5-3 ASC Reviewing Agency Comment_City of Echo_Water_Slaght 2022-03-21.

²⁵⁷ NHWAPDoc5 ASC Reviewing Agency Comment_City of Pendleton_Water_Tarter 2022-02-02.

²⁵⁸ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 5-29 of 231.

Based upon review of the correspondence from the City of Pendleton, Hermiston, and Echo affirming their ability to meet facility construction and operational water demand and the evaluation provided above, the Council finds that the construction and operation of the facility will not be likely to result in significant adverse impacts to the ability of public or private providers to provide water service.

IV.M.3. Stormwater Drainage

Construction and operation of the facility could potentially impact rural stormwater management systems. Stormwater management systems include pervious surfaces that allow rainfall and snowmelt to percolate into soils to refill aquifers, streams, or rivers. Stormwater management systems also include infrastructure to direct and store stormwater such as culverts, catch basins, storm sewers and piping, as well as holding ponds and drainage ditches.

Stormwater infrastructure that could be impacted by construction of the facility is limited to minimal facilities associated with public roads maintained by Umatilla County, state highways, and Highway I-84, which are managed by ODOT.²⁵⁹ The facility is not within the city limits of the surrounding communities of Pendleton, Hermiston, or Echo which may have more complex stormwater systems and stormwater management plans, therefore, the Council Department concurs with the applicant's statement that the facility will not have an adverse impact on stormwater drainage services to these communities because construction, operation, and decommissioning of the facility will not require modification or expansion of these public stormwater drainage facilities.

Construction related activities such as an increase in traffic, on site excavation and removal of topsoil, watering roads and construction areas for dust control, and soil contamination from inadvertent spills could impact stormwater drainage facilities associated with roads managed by the County and ODOT. The applicant explained that stormwater management infrastructure added during construction such as roadside ditches, infiltration swales, or retention basins will be left in place to continue functioning throughout the life of the facility, as necessary for continued management of stormwater.²⁶⁰ The applicant described that this stormwater infrastructure would be located on private land and will not affect stormwater management services provided by public agencies.

As discussed in ASC Exhibit U (Public Services), Exhibit I (Soil Protection), and in greater detail in Section IV.D., *Soil Protection* and IV.H., *Fish and Wildlife Habitat*, of this order, the applicant will deploy best management practices (BMPs) that will reduce soil erosion which could impact stormwater facilities associated with roads managed by public entities and roads constructed on private lands. These BMPs are included in the Draft Revegetation and Noxious Weed Plan included as Attachment P-2 (under Fish and Wildlife Habitat Conditions 1, 2 and 3) and to the

²⁵⁹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 9 of 231.

²⁶⁰ Id.

1 National Pollutant Discharge Elimination System (NPDES) 1200-C construction permit. The
2 NPDES 1200-C permit application and Draft Erosion and Sediment Control Plan (ESCP) identify
3 erosion and sediment control measures are provided as Attachment I-C (under Soil Protection
4 Conditions 1, 2, and 3) to this order. The Draft Revegetation and Noxious Weed Plan and/or the
5 ESCP will include, but are not necessarily limited to, the following:

- 6 • To the extent practicable, existing vegetation will be preserved and where vegetation
7 clearing is necessary, root systems will be conserved if possible.
- 8 • Silt fencing would be installed throughout the facility site boundary on the contour
9 downgradient of excavations, the O&M Building, and substations.
- 10 • Straw wattles will be used to decrease the velocity of sheet flow stormwater to prevent
11 erosion; used along the downgradient edge of access roads adjacent to slopes or
12 sensitive areas.
- 13 • Mulch will be used to immediately stabilize areas of soil disturbance, and during
14 reseeding efforts.
- 15 • Jute stabilizing matting, straw matting, or turf reinforcement matting will be used in
16 conjunction with mulching to stabilize steep slopes that are exposed during access road
17 installation.
- 18 • Soil binders and tackifiers will be used on exposed slopes to stabilize them until
19 vegetation is established.

20
21 Because the facility will not interconnect to existing public or private stormwater drainage
22 systems and best management practices will be employed to minimize erosion and runoff into
23 roadside stormwater systems, the Council finds that construction and operation of the facility
24 will not be likely to result in significant adverse impacts to the ability of stormwater drainage
25 service providers to provide service.

26 27 IV.M.4. Solid Waste Management 28

29 Construction, operation, and retirement of the facility will generate solid waste that will be
30 disposed of at licensed disposal facilities within the analysis area. The applicant identified, and
31 the Council affirms that the Columbia Ridge Landfill located in Arlington, OR and Finley Buttes
32 Landfill located in Boardman, OR are solid waste disposal facilities within the analysis area.

33
34 Approximately 13,000 to 16,000 total cubic yards (cy) of solid waste will be generated from the
35 construction of the facility including scrap metal (e.g., wire and rebar scraps), wood, concrete,
36 concrete washout, packing materials (such as crates, pallets, and protective and paper
37 wrapping), dirt and rock spoils.²⁶¹ Construction materials associated with the solar and battery
38 components (up to 816,812 solar modules, transformers, cooling systems, etc.) and installation
39 of those components will largely be the same as the wind facility components listed above. As
40 discussed in Section IV.N., *Waste Minimization*, the applicant represented and the Council
41 imposes Waste Minimization Condition 1 and Waste Minimization Condition 2 which require
42 the finalization and implementation of a Construction Waste Management Plan which will

²⁶¹ NHWAPPDoc2-21 ASC Exhibit V. Waste_2022-01-31. Pages 6-7 of 18.

1 identify final waste quantities, methods for separating, recycling, and disposing of waste, and
2 training for compliance with the plan. The applicant further explained that waste generated
3 during construction will be collected in a central location during construction, to be hauled
4 away by a licensed waste disposal service for disposal or recycling at the licensed facilities.
5 Excess soil from road construction and foundation excavation will be spread on site to the
6 extent practicable or hauled off-site to be disposed of in accordance with applicable
7 regulations.

8
9 As additionally noted in Section IV.N., *Waste Minimization*, after construction waste
10 minimization measures are implemented by the applicant, remaining waste and recycled
11 materials will be hauled offsite to Columbia Ridge Landfill and/or Finley Buttes Landfills, both of
12 which accept non-hazardous construction debris, industrial and special waste, including non-
13 hazardous contaminated soils. The applicant provided correspondence from these waste
14 disposal facilities in ASC Exhibit U, Attachment U-1. Both the Columbia Ridge Landfill and Finley
15 Buttes Landfills indicated they have sufficient capacity to handle the waste volumes needed for
16 disposal from construction of the facility. Finley Buttes Landfill reiterated this by stating that
17 they have more than 100 years of remaining life and can receive any nonhazardous waste.²⁶²

18 19 *Operation*

20
21 Facility operations would produce waste from replacement of energy facility components (i.e.,
22 turbine blades, solar panels and batteries) and associated packaging, and waste typical of a
23 small office. Turbine blades and solar panels would be recycled to the extent programs and
24 facilities are available or other agreements are made as discussed in Section IV.N., *Waste*
25 *Minimization* and as required under Waste Minimization Conditions 4, 5, and 6. All other non-
26 recyclable materials would be hauled offsite by a licensed hauler and disposed of offsite at a
27 licensed facility. Lead-acid batteries would be hauled offsite by a licensed hauler and disposed
28 of offsite at a licensed lead-acid battery recycling facility, such as O'Reilly Auto Parts, Baxter
29 Auto Parts, and Olsen's Auto Parts in Pendleton, Oregon; R.S. Davis Recycling in Hermiston,
30 Oregon; and at least 10 auto supply dealers in Portland, Oregon who use Interstate Batteries to
31 handle lead-acid battery recycling.²⁶³

32
33 Based on the quantity and type of solid waste generated by the facility during construction and
34 operation, existing and long-term capacity of the Columbia Ridge and Finley Buttes Landfills,
35 and compliance with the waste minimization conditions, the Council finds that construction and
36 operation of the facility will not be likely to result in significant adverse impacts to the ability of
37 solid waste disposal providers to dispose of waste.

38 39 IV.M.5. Traffic Safety

40

²⁶² NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 35-41 of 231, Attachment U-1.

²⁶³ NHWAPDoc2-21 ASC Exhibit V. Waste_2022-01-31 Page 9 of 18.

1 Construction of the facility will result in traffic impacts from the increased traffic and
2 congestion resulting from delivery trucks, equipment, and workers travelling to and from the
3 facility site.

4
5 Peak construction periods will result in approximately 500 workers onsite. Most workers will
6 drive alone; vehicle trips per day are based on an assumed 1.25 occupancy rate. Estimated
7 maximum worker daily trip rate is 400 round trips and 800 one-way trips. Estimated maximum
8 haul and delivery trip rate is 117 round trips and 234 one-way trips per.²⁶⁴ Total maximum daily
9 construction-related traffic will be approximately 2,068 one-way trips and 1,034 round trips.

10
11 Most of the construction worker traffic will likely originate from the communities along I-84,
12 including Boardman and Pendleton. Some workers may commute along US Highway 395 from
13 Hermiston and Stanfield to the work site with a small number of workers who may stay in the
14 communities of Pilot Rock (which is located east of the facility) or Heppner in Morrow County
15 (which is located southwest of the facility). Primary and secondary transportation routes, which
16 include rural major collectors, rural minor collectors, or rural local roads are discussed further
17 below.

18
19 The 234 one-way truck trip and deliveries, throughout all construction phases would include
20 the following activities:

- 21 • Civil construction and material (aggregate, culverts, etc.) supply for new roads and
22 upgrades to existing roads, turbine erection pads and crane pads, solar
23 inverter/transformer and BESS areas, substations, laydown areas, collector lines,
24 transmission lines, and the O&M Building;
- 25 • Turbine and related component delivery, including towers, nacelles, hubs, blades, pad
26 mount transformers, substation equipment and transformers, collector line
27 components, transmission line towers and conductor, and O&M Building materials;
- 28 • Solar modules and related equipment delivery, including racking system structure,
29 electrical wiring/cabling and equipment, steel posts, inverters, and transformers;
- 30 • BESS delivery, including containers, battery modules, and all related equipment based
31 on the final technology selected;
- 32 • Material supply for turbine foundations and solar area foundations such as for posts and
33 BESS containers (sand, aggregate, cement, and steel rebar);
 - 34 ○ The applicant assumes concrete would be batched on-site in temporary plants;
35 local suppliers may be used instead at the option of the construction contractor;
- 36 • Delivery of on-site construction equipment such as cranes, dozers, graders, compactors,
37 forklifts, etc.; and
- 38 • Water truck traffic (assumes water comes from Hermiston, Stanfield, Echo, and
39 Pendleton).

²⁶⁴ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231, Section 3.2.2.6. Project Trip Generation. Because construction of the facility components is not uniform, the applicant increased truck delivery trips by 25 percent to account for peak periods to yield the maximum round/one-way trips.

1 Primary transportation corridors, major county roads, and local county roads will carry the
2 majority of construction-related truck and workforce traffic. The workforce is expected to use
3 the same roads to access the facility site as the equipment transporters. Figure 12: *Preliminary*
4 *Construction Transportation Routes*, below illustrates the primary and secondary transportation
5 routes to be used for construction activities. The 2002 Umatilla County Transportation System
6 Plan (TSP) county road classification system includes four road classes; all arterials in Umatilla
7 County are interstate, national, and state highways, part of the state highway system; rural
8 county roads are classified as either rural major collectors, rural minor collectors, or rural local
9 roads and are assigned a County Road Number by the County Public Works Department.²⁶⁵

11 The primary corridors and highways identified by the applicant are I-84, I-82, and US Highway
12 395 (US- 395). The applicant discussed that the routes that will experience the highest increase
13 in traffic from deliveries would be County Road (CR) 1350 (Coombs Canyon Road) from US-
14 395.²⁶⁶ Other local county roads, such as CR-1361, CR-1362, CR-1363, and CR-1394 will
15 experience increases in traffic. Based upon review of maps in the vicinity of the facility and the
16 TSP, the Council affirms that Rieth Road may be used for deliveries and worker access to the
17 site boundary, particularly from the northern highway routes and to access the northern parts
18 of the site boundary. Rieth Road is identified as County Road 1300 and provides access to town
19 of Rieth, Nolin, and an alternative route to Echo.²⁶⁷ Existing private access roads will also have
20 increased traffic and additional private access roads will also be developed within the site
21 boundary to each of the wind turbines, the solar array, substations, and associated facilities.

23 It is also possible that, based on final design and transportation routes selected to construct the
24 facility, roads through the communities of Echo and Nolin can be used and potentially
25 impacted. Primary roads in the City of Echo include but are not limited to; Oregon Trail Road,
26 South Thielsen Street (which turns into Rieth Road as it travels south), South Kennedy Street,
27 and Echo Road. Roads within the unincorporated community of Nolin include Cunningham
28 Road, CR 1133 and CR1350, which is a proposed transportation route for the facility as
29 illustrated below in Figure 12: *Preliminary Construction Transportation Routes*. If these roads
30 are used as transportation/haul routes for construction of the facility, they will likely be
31 included in any road inventory established prior to construction under a road use agreement to
32 be executed with Umatilla County, under Public Services Condition 1, however, the Council also
33 recommends the applicant coordinate with these governments, as necessary, to ensure any
34 roads managed by the City or unincorporated community are inventoried and maintained from
35 potential construction traffic damage.

²⁶⁵ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231. The applicant highlights in ASC Exhibit U that, in 2018, they confirmed with the Umatilla County Planning Department that the 2002 TSP is the most current version, and no updates to the TSP have occurred, and this remains the case as of September 24, 2020.

²⁶⁶ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231.

²⁶⁷ Umatilla County 2002 Transportation System Plan, Table 4-1: Important County Roads.

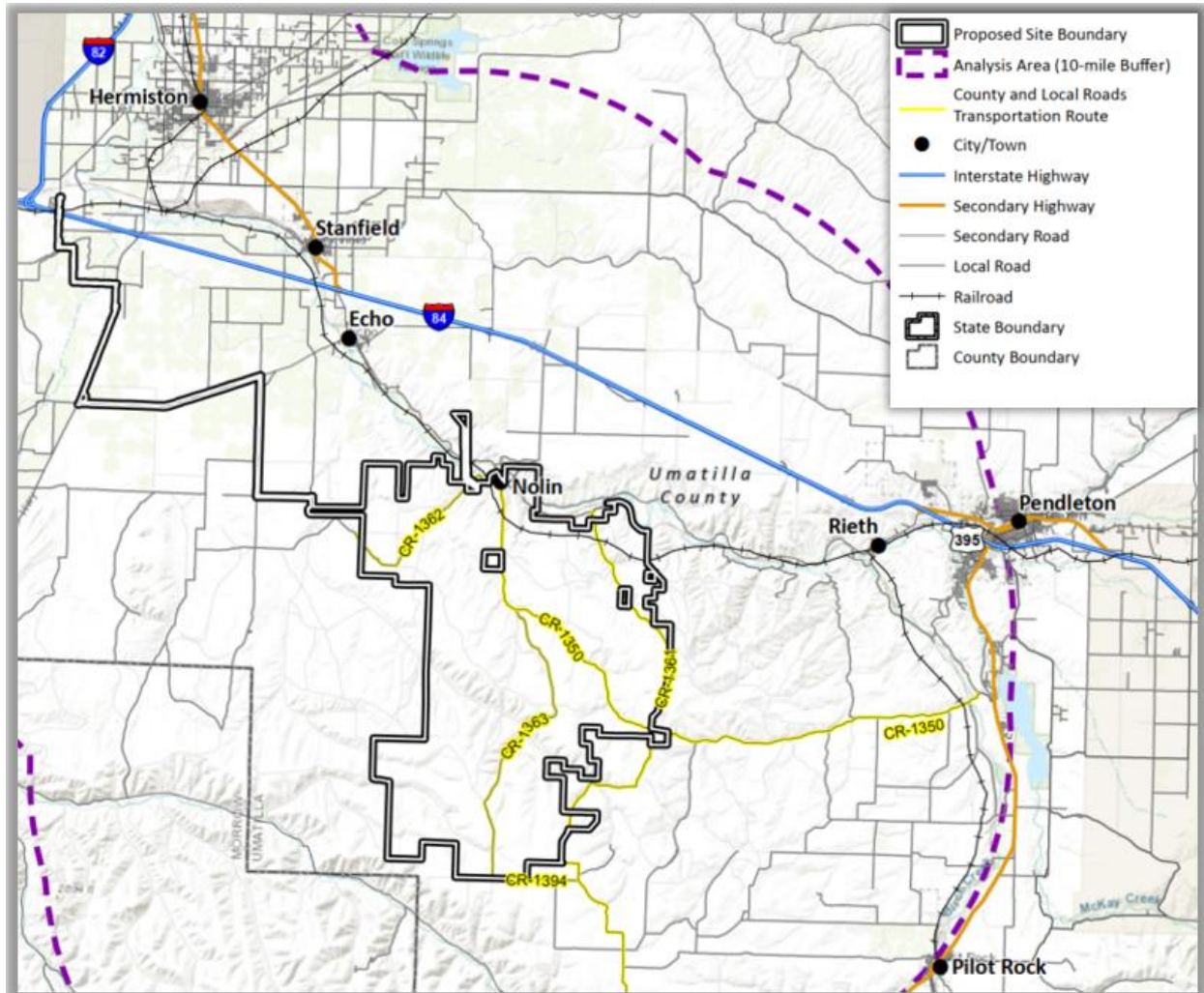
https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_TSP_June_02.pdf Accessed on 03-01-2022.

1 *Potential Roads Impacted from construction and operation of the UEC Cottonwood Route:*

2
3 As described in Section III.A.2., *Related or Supporting Facilities*, the applicant proposed a
4 Umatilla Electric Cooperative (UEC) Cottonwood Route 230 kV transmission line alternative that
5 would be 25.3 miles long, connecting the northern substation to an existing UEC Cottonwood
6 substation. ASC Exhibit B and ASC Exhibit C provided some description and maps of this route,
7 including ASC Exhibit B, Section 7.1.2.1 description of the segment lengths and right of way
8 (ROW) widths. However, all the roads that the alternative route will follow are not identified.
9 The Department provided the following description of the roads that the route will follow so
10 that, if selected, these roads will be included and evaluated in an impact assessment and road
11 use agreement under Public Services Condition 1, discussed further below.

12
13 From substation north of Interstate I-84, the proposed 230 kV transmission line crosses I-84 and
14 continues south on Colonal Jordan Road/CR 1325(ASC Exhibit C, Figure C-4.1). At approximately
15 the intersection of Colonal Jordan Road and Madison Sayler Road/CR 1334, the route appears
16 to leave a road ROW and travels east, then south, and then east again though agricultural lands
17 (ASC Exhibit C, Figure C-4.2), until it meets Highway 207/Hermiston Highway at approximately
18 the intersection of Curtis Road (ASC Exhibit C, Figure C-4.3). The route travels south on Highway
19 207 until Oregon Trail Road (Oregon Trail Road is east of Highway 207, and Madison Road is to
20 the west pf Highway 207) (ASC Exhibit C, Figure C-4.3, 4.4, and 4.6). The route travels
21 east/northeast on Oregon Trail Road (ASC Exhibit C, Figure C-4.6 and 4.7) until White House
22 Road/CR1343 where it pivots sharply to head south on White House Road (ASC Exhibit C, Figure
23 C-4.8 and 4.10). At CR 1348 and White House Road the route then turns south and then east
24 (ASC Exhibit C, Figure C-4.10 and 4.11) until it connects to the site boundary for the wind facility
25 components.
26

1 **Figure 12: Preliminary Construction Transportation Routes**²⁶⁸



2
3 When evaluating the Council's Public Services standard for potential impacts to public and
4 private traffic safety providers, the Council may evaluate the estimated average and peak
5 construction volumes from the construction of a facility and how this impacts the level of
6 service (LOS) of existing roads. According to the Umatilla County TSP, and outlined by the
7 applicant in ASC Exhibit U, a LOS evaluation included the consideration of factors that included
8 travel speed, delay, frequency of interruptions in traffic flow, relative freedom for traffic
9 maneuvers, driving comfort and convenience, and operating costs.²⁶⁹ If additional traffic
10 generated by construction of the facility were to exceed the capacity of existing roads resulting
11 in significant and ongoing delays in travel times, or if there is unmitigated damage to roads,
12 these will lower the level of service provided to the public.

²⁶⁸ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31, Figure U-1.

²⁶⁹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231.

1 The Umatilla County TSP defines LOS letter grades from A to F, with each grade representing a
2 range of volume to capacity (V/C) ratios. A V/C ratio is the peak hour traffic volume on a
3 highway divided by the maximum volume that a highway can handle. If traffic volume entering
4 a highway section exceeds the section's capacity, then disruptions in traffic flow will occur,
5 reducing the LOS.²⁷⁰ ASC Exhibit U, Table U-3 identified Umatilla County's LOS designations
6 where LOS A represents free-flowing traffic and LOS F represents conditions where the road
7 system is totally saturated with traffic and movement is very difficult.

8
9 Table 18: *Construction Traffic Volumes and Level of Service on Primary Access Roads*, below,
10 offers the applicant and Department's synthesis of potential construction-related traffic
11 impacts on road segments that are anticipated to carry the majority of construction traffic.
12 Table 18 provides the highway's "existing" average daily traffic (ADT), estimated LOS, peak one-
13 way trips of workers and deliveries, the ADT with facility traffic and the anticipated LOS taking
14 into consideration impacts from facility construction. The proposed route segment which will
15 have a reduced LOS (from E to E/F) from facility traffic impacts is the US-395 segment, south of
16 Pendleton at ODOT Station 30-008 which directs traffic to CR-1350. This segment has a lower
17 existing LOS where passing is virtually impossible and vehicles driving close together becomes
18 intense when slower vehicles or other interruptions are encountered.²⁷¹

19
20 The applicant explained and the Council concurs that the LOS criteria ("E" and "E/F") is based
21 upon typical traffic for two-lane highways and this segment within the city limits of Pendleton
22 has traffic lights, lower speed limits, and is a four-lane highway (compared to a two-lane
23 highway for Umatilla County LOS criteria). Further south, US-395 tapers to a three and then
24 two-lane highway, where the LOS improves to an "A" rating without facility traffic, to an
25 anticipated "A" rating with construction-related traffic from the facility. The applicant also
26 highlighted that delivery trucks will be traveling to and from the site on an ongoing basis
27 through the day, and construction workers will be commuting on the earlier and later ends of
28 typical workday hours, therefore actual impacts to these areas and other routes may be less
29 than anticipated and shown in Table 18. Furthermore, the applicant will implement best
30 management practices (BMPs) to avoid, reduce, and mitigate impacts to traffic service
31 providers including minimizing heavy truck deliveries (dump trucks, concrete trucks, standard
32 size tractor-trailers or flatbeds) during peak traffic times and movements of oversize trucks will
33 be prohibited during peak times (rush-hour traffic periods), to the extent practicable. These
34 measures and other traffic-related BMPs are represented in Attachment U-1 the draft Traffic
35 Management Plan and further below in discussion associated with Public Services Conditions 1
36 and 2.

37

²⁷⁰ Id.

²⁷¹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 14 of 231, Table U-3; Umatilla County 2002
Transportation System Plan, Table 4-3: Important County Roads.
https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_TSP_June_02.pdf Accessed on
03-01-2022.

Table 18: Construction Traffic Volumes and Level of Service on Primary Access Roads

Location	Existing ADT (2018 ¹)	Estimated Current LOS ²	Estimated Existing V/C ^{3,4}	Project Construction Traffic ⁵			ADT with Project Traffic	Projected V/C with Peak Construction Traffic ⁴	Projected LOS with Peak Construction Traffic
				Total Peak Trips per day, one-way	Worker Traffic, peak trips per day, one-way	Truck Traffic, peak trips per day, one-way			
I-84 – Pendleton Station 30-004 ⁶	17,500	B	0.51	1,034	800	234	18,534	0.55	B (no change)
US-395 – South Pendleton Station 30-008	25,900	E	0.96	1,034	800	234	26,934	0.99	E-F
US-395 – 0.1 mile south of SW Gateway Avenue	4,300	A	0.16	1,034	800	234	5,334	0.2	A (no change)
US-395 – 0.02 mile south of Coombs Canyon Rd (CR-1350)	3,600	A	0.42	1,034	800	234	4,634	0.55	B
<ol style="list-style-type: none"> 1. Data from ODOT (2018c). 2. Based on estimated volume to capacity (V/C) and equivalent level of service (LOS) as presented in ASC Exhibit U, Table U-3. 3. Estimated by dividing existing average daily traffic (ADT) by the maximum ADT of the federal functional class for the applicable highway segment (from ASC Exhibit U, Table U-4). 4. Except for US-395 within Pendleton urban growth boundary (existing and with facility traffic), segments below maximum ODOT V/C ratios in ASC Exhibit U, Table U-2. 5. One-way trips are counted to tally both the inbound and outbound trips for facility traffic (i.e., round-trip count would be half of total one-way trips). 6. 17,500 ADT; measured at automatic traffic recorder station 30-004 on I-84, west of Pendleton. ODOT 2018. <p>Source: NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31, Table U-5.</p>									

1 The Umatilla County TSP estimates that the average daily traffic (ADT) volumes for local roads is
2 500 ADT, county roads which include rural county roads is below 1,000 ADT, and heavier use
3 county/collector roads is between 1,200 and 10,000 ADT. The applicant explained that access
4 to and from “highly important” roads at intersecting minor roads is adequate, reaching an
5 estimated LOS B, where peak hour minor road traffic volumes reach up to 150 vehicles per
6 hour. The Umatilla County TSP explains that some county roads serve only local uses, yet other
7 county roads serve rural needs such as providing connections to higher functioning facilities
8 such as a state highway or interstate freeway, accessing large businesses in rural areas, and
9 accessing rural communities and farms, and these types of roads are considered to be of higher
10 importance to Umatilla County.²⁷²

11
12 The applicant explained that, based upon field observations, County Roads (CR)-1350, CR-1361,
13 and CR-1363 conditions vary from improved gravel two-lane roads to two-track roads with
14 minimal aggregate surfacing, yet are well-maintained gravel roads in good condition.²⁷³ The
15 applicant maintained that construction truck traffic should also not adversely impact the CR’s
16 designated in the ASC because they are constructed for legal loads and currently serve truck
17 traffic that would be similar to construction-related truck traffic. Another category of roads that
18 will be used for facility construction and operation are local county roads that are not paved.²⁷⁴
19 The applicant stated that these roads are either one or two lanes wide, have some to minimal
20 aggregate on the surface, frequently have culvert pipes with inadequate covers, and have
21 grades and corners that may require flattening or widening to accommodate the large and long
22 construction trucks, in particular the turbine component and transformer delivery trucks. These
23 roads may require the addition of more road base aggregate to support the loads, replacement
24 or lengthening of culverts, grading, and replacement of cattle guards. Finally, the applicant
25 stated that private roads will be used for construction and operation of the facility and may
26 require upgrading to accommodate truck traffic associated with the wind farm construction,
27 which could include widening, replacing cattle guards, replacing or adding covers to culverts, or
28 adding road base aggregate to the existing private roads.

29
30 The Umatilla County TSP designates road design standards for county roads including arterial,
31 major and minor collector, and local roads, which include surface width, speed limits, pavement
32 or gravel standards, and shoulder width. The applicant represented that at the design stage for
33 the facility, a careful inspection of county roads used for construction and operation of the
34 facility will be required to determine where and what improvements will be needed to be made
35 so that roads will be serviceable for construction traffic. The applicant expects that existing
36 local unpaved roads will need to be upgraded from their current status to support construction.
37 To ensure that road improvements are done consistent with current Umatilla County codes and

²⁷² Umatilla County 2002 Transportation System Plan, Table 4-3: Important County Roads.
https://www.co.umatilla.or.us/fileadmin/user_upload/Planning/Umatilla_County_TSP_June_02.pdf Accessed on
03-01-2022. Rieth Road is considered a major collector and considered of high important to the County. The
Department clarified that the applicant did not represent that Rieth Road will be used as an access route for
construction-related traffic.

²⁷³ These roads are located within the facility site boundary and will be used during construction and operation.

²⁷⁴ The Department highlighted that these roads are not named in ASC Exhibit U.

standards, the applicant represented that it will cooperate with the Umatilla County Public Works Department to obtain permits to improve the roads and also to make repairs to roads that might be damaged from construction traffic. In addition, the applicant will enter into road use agreements with Umatilla County, to ensure that public roads impacted by construction would be left in as “good or better” condition than that which existed prior to the start of construction.

Based on other road use agreements reviewed by EFSC and the Department, and a review of a typical road use agreement used by Umatilla County, the Council understands that provisions typical of road use agreements between an applicant and a County or its Public Works Department includes, but is not limited to:

- Applicant responsibility to identify final transportation routes based on final design;
- Conduct pre-construction road inventory that identifies the condition of all roads used during construction;
- Applicant responsibility to pay for road improvements necessary for construction as well as any necessary road repairs caused from construction of the facility;
- Applicant shall maintain roads to County standards which include the ability for the public and emergency services to access and use roads; and
- Conduct post-construction inventory to compare with pre-construction to negotiate all necessary improvements that must be made to roads.

The applicant stated that a component of road use agreements will be a traffic management plan which will be employed by its construction contractor and will provide best management practices (BMP’s) to minimize traffic impacts due to construction traffic congestion, flagging needs, road closures, and large equipment and deliveries. All BMPs are listed in their entirety in Attachment U-1, a draft Traffic Management Plan, some of which include:

- Coordinating the timing and locations of road closures or oversize load movements in advance with emergency services such as fire, paramedics, and essential services such as mail delivery and school buses.
- Maintaining emergency vehicle access to private property.
- Posting signs on county- and state-maintained roads, where appropriate, to alert motorists of construction and warn them of slow, merging, or oversize traffic.
- Using traffic control measures such as traffic control flaggers, warning signs, lights, and barriers during construction to ensure safety and to minimize localized traffic congestion. These measures would be required at locations and during times when trucks would be entering or exiting highways frequently.
- Restoring residential areas as soon as possible and fencing construction areas near residences at the end of the construction day.

The Department compiled all applicant-representations for avoiding, minimizing and mitigating impacts related to construction traffic for the facility into a draft Traffic Management Plan (Plan) which is attached to this order as Attachment U-1. To ensure that construction and operation of the facility will not be likely to result in significant adverse impacts on the ability of

1 public and private service providers for traffic safety including impacts to roads and traffic flow,
2 the Council imposes Public Services Conditions 1 and 2, which requires the finalization of the
3 Plan, submission of final road use agreements, and adherence to the final Traffic Management
4 Plan during construction. The Council understands that it is likely that the applicant or its
5 construction contractor may have its own Traffic Management Plan, which may be provided if
6 it, at a minimum, includes the provisions in the draft Traffic Management Plan, Attachment U-1.

7
8 **Public Services Condition 1 (PRE):** Prior to construction of the facility, or facility component,
9 the certificate holder shall:

- 10 a. Based on final design, finalize, identify, and provide maps of all public roads used for
11 construction, road names, locations, segments used, and road conditions and include in
12 Final Traffic Management Plan identified in (b) and (c).
13 b. Submit executed road use agreements between Umatilla County and the certificate
14 holder or its contractor. Any Final Traffic Management Plan that is part of the road use
15 agreements shall include, at a minimum, the provisions designated in Section II of
16 Attachment U-1 of the Final Order on ASC.
17 a.If final transportation/haul routes selected are within the City of Echo or the
18 unincorporated community of Nolin and are not managed by the County, the
19 certificate holder shall contact and coordinate with the local governments, execute a
20 similar road use agreement that includes, at a minimum, the provisions designated in
21 Section II of Attachment U-1 of the Final Order on ASC, and submit any final
22 agreements to the Department.
23 c. If a Final Traffic Management Plan designated in sub (a) is not included in road use
24 agreements executed with Umatilla County, then submit a Final Traffic Management
25 Plan. A copy of the Final Traffic Management Plan shall be provided to the Department
26 and Umatilla County Public Works Department. The Construction Traffic Management
27 Plan shall, at a minimum, include the provisions in Section II of Attachment U-1 of the
28 Final Order on ASC.
29 d. Submit to the Department, any ODOT permits obtained by the certificate holder, its
30 third-party contractors or subcontractors including but not limited to Oversize Load
31 Movement Permit/Load Registration, Permit to Occupy or Perform Operations Upon a
32 State Highway, and/or an Access Management Permit.

33 [PRE-PS-01]
34

35 **Public Services Condition 2 (CON):** During construction of the facility, or facility component,
36 the certificate holder shall ensure that construction contractors adhere to the requirements
37 of the Final Traffic Management Plan.

38 [CON-PS-01]
39

40 Facility operation is anticipated to require 10 to 15 employees that would likely live within the
41 surrounding communities within a commutable distance to site.²⁷⁵ Operational traffic is
42 anticipated to result in a maximum of 30 daily, one-way light-duty vehicle trips, mostly

²⁷⁵ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 12-24 of 231.

1 consisting of operational workers and occasional specialty contractors that may visit the
2 proposed site. The applicant highlights, however, that some operational activities (wind turbine
3 or nacelle replacement, or major repairs) may require oversized haul trucks, yet this would not
4 be frequent. The Council finds that the operational level of traffic increase would not be likely
5 to result a potential impact to public or private traffic safety providers because the primary haul
6 routes and access routes would have sufficient capacity to manage this increase in volume
7 without impacting the quality of traffic service. The Department also recommends that these
8 roads would be addressed, maintained, or improved after construction under the road use
9 agreement with the County, under Public Services Condition 1 above.

10
11 Based on the evaluation and findings provided above and on compliance with the Public Service
12 Conditions which address applicant proposed and Department measures to reduce and
13 mitigate traffic impacts associated with the construction and operation of the facility, the
14 Council finds that potential traffic impacts from facility construction and operation will not be
15 likely to result in significant adverse impacts to the ability of transportation providers to provide
16 traffic safety.

17 IV.M.6. Air Traffic

18
19
20 Facility construction and operation could result in impacts to private and public air traffic
21 (airport) providers from impacts to navigable airspace from the taller facility components such
22 as the proposed transmission line, wind turbines, and met towers. Also provided in this section
23 is an evaluation of the potential for glare from the solar panels to impact air traffic providers
24 and a Council evaluation of potential impacts resulting from the use of helicopters during
25 construction. The applicant also evaluated the potential for glare from the solar panels to
26 impact air traffic providers, which is discussed in this section. The tallest facility structures that
27 may create an impact for public or private airports are the wind turbines with a maximum blade
28 tip height of 496 feet and the met towers with a maximum height of 266 feet. The 230 kV
29 transmission lines associated with the UEC Cottonwood Route and BPA to Stanfield Route will
30 be aboveground, on wooden H-frame or steel monopole structures approximately 100 to 140
31 feet tall and the aboveground portions of the collector lines for the wind and solar facility
32 components may be up to 100 feet tall.

33 *Potential Impacts to Airports/Navigable Airspace*

34
35
36 The Department coordinated with the Oregon Department of Aviation (ODA) to determine
37 which airports are located within the analysis area, the proximity of facility components to
38 airports, potential obstructions to navigable airspace from tall facility structures, and to address
39 any concerns ODA has regarding potential impacts to public and private providers of air traffic
40 safety.²⁷⁶ Based on this consultation and data provided by the applicant, the Department

²⁷⁶ OAR 345-001-0010(51)(i) designates the Oregon Department of Aviation as a reviewing agency for the EFSC review process.

generated Table 19: *Proximity of Facility Site Boundary and Components to Regional Airports*, below to illustrate the distance of facility components that may be a concern to airports.

Table 19: Proximity of Facility Site Boundary and Components to Regional Airports

Airport	UEC Transmission Line Site Boundary		Energy Facility Site Boundary	
	Distance (mi)	Direction ¹	Distance (mi)	Direction ¹
West Buttercreek	3.44	SSW	8.09	W
Eastern Oregon Regional, Pendleton	18.03	ENE	7.8-8.45 ²	ENE
Hermiston Municipal	5.79	ENE	10.2	NNW
Lexington	23.82	SW	26.01	WSW
Source: Department compiled with data provided by applicant and in consultation with Oregon Department of Aviation. ¹ Cardinal direction provided are the direction from site boundary/facility component location to the airport location. ² Applicant estimated distance from the site boundary to the Eastern Oregon Regional Airfield at Pendleton as 7.8 miles and Department GIS estimate is 8.45 miles.				

ASC Exhibit U and ODA evaluated two airports that are closest to the facility site boundary associated with the UEC Cottonwood transmission line located in the northwest portion of the site boundary and the energy generating facility (wind and solar) which is located in the central/western area closer to Pendleton.²⁷⁷ The West Buttercreek Airport is a private airfield located 3.4 miles southwest of the nearest transmission structures near the UEC Buttercreek substation, however, the nearest proposed wind turbine will be approximately 10 miles to the east of the airport. The other airport identified is the Eastern Oregon Regional Airfield at Pendleton, which is approximately 7.8 miles northeast of the site boundary where the closest facility structures appear to be the 230-kV transmission structures associated with the BPA Stanfield line and wind turbines in the northern site boundary.²⁷⁸

Because facility components would exceed 200 feet in height, the facility requires an airspace review by the Federal Aviation Administration (FAA) and ODA subject to the standards in Code of Federal Regulations (CFR): Title 14; Aeronautics and Space: PART 77—Safe, Efficient Use, and Preservation of the Navigable Space, specifically, all facility components are subject to compliance with FAA Part 77.9 Construction or alteration requiring notice (a-d), FAA Part 77.17 Obstruction standards (a-b) and Obstruction Standards of OAR 738-70-0100.²⁷⁹ To determine if new supporting facilities or structures more than 200 feet in height or within the FAA Part 77 Imaginary Surface threshold distances pose an obstruction to aviation navigation, the applicant

²⁷⁷ NHWAPDoc3-7 pASC Aviation comment 2020-03-12.

²⁷⁸ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231.

²⁷⁹ NHWAPDoc5-1 ASC Reviewing Agency Comment_ODA_Aviation_Thompson 2022-02-17.

1 must undergo airspace review by the FAA and ODA through submittal of a completed FAA Form
2 7460-1. The applicant maintained and based on review of ODA letters and understanding of
3 FAA Form 7460-1 criteria the Department affirmed, that there are not public use or military
4 airports within 3.8 miles of the site boundary therefore, the need for a completed FAA Form
5 7460-1 is not triggered by the FAA Part 77 Imaginary Surface thresholds, but solely by the
6 height of the facility component criteria.^{280, 281}

7
8 The applicant indicated in ASC Exhibit U that it submitted the FAA form 7460-1 to the FAA in
9 March of 2020, requesting a Determination of No Hazard to Air Navigation in order to allow the
10 FAA and ODA to evaluate the effect of the construction on air safety and navigable airspace.
11 The applicant continued by explaining that a Determination of No Hazard to Air Navigation will
12 be issued if the aeronautical study concludes that the construction or alteration would exceed
13 an obstruction standard (200 feet) but would not have a substantial aeronautical impact to air
14 navigation. The Department highlighted that according to the CFR Title 14 Chapter; Subchapter
15 E Part 77, a future object would be an obstruction to air navigation if it is of greater height of
16 499 feet above ground level (AGL) at the site of the object or an object 200 feet or taller
17 exceeds the FAA Part 77 Imaginary Surface threshold distances discussed above.²⁸² The tallest
18 facility components will be the wind turbines with a maximum total height of 496 feet, which is
19 just below the 499 foot threshold. The ODA verified in an August 2021 letter that based their
20 preliminary review of application materials and Department-complied data they; "... do not
21 believe the proposed structures within the proposed micro-siting corridor will result in any
22 hazards to navigable airspace...At 496', the turbines will be just below the 499' threshold per
23 Part 77 standards, which is less cause for concern as well. In addition, the "worst case" turbines
24 appear to also be well outside the 3-nautical mile perimeter of nearby airports."²⁸³

25
26 The applicant explains that an FAA Determination of No Hazard to Air Navigation may include
27 conditional provisions, limitations to minimize potential problems, supplemental notice
28 requirements, or requirements for marking and lighting, as appropriate. OAR 345-024-0015(6),
29 discussed further in Section IV.P.2., *Cumulative Effects Standard for Wind Energy Facilities*, and
30 in ASC Exhibit DD, requires the use of techniques to prevent casting glare from the site and the

²⁸⁰ FAA Part 77 Imaginary Surface thresholds:

- within 20,000 ft of a public use or military airport and exceed a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 ft.
- within 10,000 ft of a public use or military airport and exceed a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft.
- within 5,000 ft of a public use heliport which exceeds a 25:1 surface.

NHWAPDoc5-1 ASC Reviewing Agency Comment_ODA_Aviation_Thompson 2022-02-17.

²⁸¹ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. ASC Exhibit U states that the West Buttercreek Airport is a private field that the FAA does not evaluate, located approximately 3.7 miles from an existing, operating commercial wind power project. The West Buttercreek Airport is, however, included in the EFSC review of public and private providers of air traffic safety (airports).

²⁸² CFR. Title 14 Chapter I Subchapter E Part 77. PART 77 - SAFE, EFFICIENT USE, AND PRESERVATION OF THE NAVIGABLE AIRSPACE <https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77> Accessed 03-08-2022.

²⁸³ NHWAPDoc3-7 pASC Aviation comment 2020-03-12

1 use of minimum lighting necessary for safety and security purposes, except as otherwise
2 required by FAA and ODA. The applicant explains that the turbines would be marked and
3 lighted only as necessary for safety and security purposes according to FAA standards (FAA
4 Advisory Circular 70/7460-1L), but no other lighting would be used on the turbines. FAA
5 standards detail the turbines and towers should be painted white or light gray, making them
6 visible to pilots from the air.²⁸⁴ Flashing red aviation lighting would be mounted atop turbines,
7 and under current FAA standards, all of the lights would be programmed to flash in unison, so
8 that all of the wind facility components would be perceived as a single unit by pilots flying at
9 night. FAA lighting may also be required or recommended to be installed on the met towers,
10 depending on the overall lighting scheme for the facility, which would be determined by the
11 FAA, ODA, the applicant and any participating agencies in the FAA commenting process, to be
12 determined prior to operation and in consultation with FAA. The ODA indicates in its comment
13 letter on the ASC that it may make recommendations for lighting of wind turbines and possibly
14 transmission lines upon its under OAR 738-070-0060 of FAA Form 7460-1 Notice of Proposed
15 Construction or Alteration.²⁸⁵

16
17 The applicant specified that it will provide a record of all correspondence with FAA and ODA to
18 the Department and EFSC no less than 30 days prior to construction, which will include FAA
19 determinations from its review of the FAA Form 7460-1, and the applicant indicated that it will
20 base the final lighting design on FAA recommendations.²⁸⁶ To determine if any new or replaced
21 supporting facilities or structures will pose an obstruction to aviation navigation and public or
22 private providers of air traffic, ODA recommends and the Council affirms that the applicant will
23 be required to first submit the FAA Form 7460-1 to ODA for review and comment, which meets
24 the noticing requirements and ODA's review under OAR 738-070-0060.²⁸⁷ Further, as described
25 in ASC Exhibit E (Permits) the applicant listed that it will submit a Supplemental Notice of Actual
26 Construction or Alteration Form 7460-2, which is a form submitted to the FAA that must be
27 filed within five days after construction reaches its greatest height as specified in the No Hazard
28 Determination (result of the FAA review of the FAA Form 7460-1).

29
30 To ensure that facility construction and operation will not be likely to impact private and public
31 air traffic (airport) providers from impacts to navigable airspace from the taller facility
32 components, and to reflect the applicant-representations for FAA coordination, documentation
33 and required facility lighting, the Council imposes the following conditions:

34
35 **Public Services Condition 3 (PRE):** Prior to construction of the facility, facility
36 component or phase, as applicable, the certificate holder shall submit 7460-1 Notice of
37 Proposed Construction or Alteration Forms for all new or replaced supporting facilities

²⁸⁴ NHWAPPD02-29, ASC Exhibit DD. Specific Standards_2022-01-31 Page 13-14 of 16.

²⁸⁵ NHWAPPD05-1 ASC Reviewing Agency Comment_ODA_Aviation_Thompson 2022-02-17.

²⁸⁶ NHWAPPD02-20 ASC Exhibit U. Public Services_2022-01-31. Pages 12-24 of 231and NHWAPPD02-29, ASC Exhibit DD. Specific Standards_2022-01-31 Page 13-14 of 16.

²⁸⁷ NHWAPPD05-1 ASC Reviewing Agency Comment_ODA_Aviation_Thompson 2022-02-17.

1 or structures that meet the height and imaginary surface criteria for notice to FAA and
2 ODA. Provide copies of FAA determinations and ODA comments to the Department.
3 [PRE-PS-02]
4

5 **Public Services Condition 4 (CON):** Within five-days after construction of facility
6 components evaluated in the FAA Form 7460-1 reach their greatest height as specified
7 in the FAA determinations listed in Public Services Condition 3(b), the certificate holder
8 shall submit 7460-2 forms to FAA and Aviation and shall report both timing of
9 submission and any results to the Department.
10 [CON-PS-02]
11

12 **Public Services Condition 5 (OPR):** During facility operation, the certificate holder shall
13 operate the facility in compliance with FAA required lighting for facility wind turbines,
14 met towers, and transmission line(s).
15 [OPR-PS-01]
16

17 *Potential Impacts from Solar Panel Glare* 18

19 Solar facility components will not meet the height or imaginary surface criteria necessitating
20 notice to the FAA and ODA via the Form 7460-1.²⁸⁸ ASC Exhibit U, Attachment U-4 is A *Glare*
21 *Analysis Report* that assessed the potential for glare impacts on nearby airports (and on
22 vehicular traffic). To support the conclusion that a Form 7460-1 is not necessary for the solar
23 facility components, the applicant's consultant used the online FAA Notice Criteria Tool to
24 identify whether a proposed structure is in proximity to a jurisdictional air navigation facility
25 and to identify the final approach flight paths that may be considered vulnerable to a proposed
26 structure's impact on navigation signal reception. The Glare Analysis is based upon the FAA's
27 2010 Technical Guidance for Evaluating Selected Solar Technologies on Airports and 2018
28 regulatory guidance under 78 Federal Register 63276 Interim Policy, FAA Review of Solar Energy
29 System Projects on Federally Obligated Airports.²⁸⁹ The FAA guidance documents recommend
30 that glare analyses should be performed on a site-specific basis using the Sandia Laboratories
31 Solar Glare Hazard Analysis Tool (SGHAT), which was completed by the applicant's consultant.
32 SGHAT technology was used as part of an online tool (GlareGauge) developed by Sandia
33 National Laboratories. The Glare Analysis includes two vehicular traffic routes from 12
34 observation points; where Analysis 1 represents the point of view from an average first floor
35 residential/commercial structure and typical commuter car, and Analysis 2 represents the point
36 of view from an average second floor residential/ commercial structure and typical semi-tractor
37 trailer truck. Analysis 3 focused on modeling the airports; the four, 2-mile final approach flight
38 paths associated with Eastern Oregon Regional Airport at Pendleton and the two, 2-mile final

²⁸⁸ ODA and FAA may evaluate the solar facility components upon its review of the Form 7460-1 designated in Public Services Condition 3.

²⁸⁹ These are the most recent technical and policy guidance documents on this matter from the FAA.

approach flight paths associated with West Buttercreek Airport.²⁹⁰ All three analyses included 18 separate “PV Array Areas,” which were segmented polygons generally representative of the solar facility layout, because, the applicant explained, segmentation of the solar facility layout allows GlareGauge to represent potential ocular impacts more accurately as a result of the operation of the solar facility.²⁹¹ Section 5.0 of Attachment U-4 included other conservative assumptions inputted into the Glare Analysis. Table 20: *Glare Analysis Result Summary*, below provides a summary of the three analyses conducted in ASC Exhibit U, Attachment U-4.

Table 20: Glare Analysis Result Summary

Analysis No.	OP Height (feet)	Route Height (feet)	Total Green Glare Predicted (annual minutes) ¹	Total Yellow Glare Predicted (annual minutes)	Total Red Glare Predicted (annual minutes)	Total Glare Predicted (annual minutes)	Total Potential Glare Percentage of Annual Daylight Hours ²
1	6	5	0	1967	0	1967	0.75
2	16	9	0	2136	0	2136	0.81
3	-	Variable (flight paths)	0	0	0	0	0
¹ . Total annual daylight minutes equal approximately 262,800. ² . Total annual daylight hours equal approximately 4,380 Source: NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31, Attachment U-4, Table 7.							

The vehicular Analyses 1 and 2 predicted yellow glare at the modeled road receptor CR-1350-1 with .75 percent and .81 percent, respectively, of annual daylight hours primarily during the early morning and late evening hours (5:00-6:00 a.m.).²⁹² The applicant continued in explaining that this is a conservative total because, in general, tracking and backtracking of the panels would occur at a slower pace than assumed by GlareGauge therefore would result in significantly less glare experienced than predicted. The Glare Analysis also assumed there was no vegetative blocking from the road to the segmented panels, yet at these areas there is vegetation and buildings.

²⁹⁰ At the request of the Department/ODA, the applicant included the West Buttercreek Airport in the Glare Analysis although it is not Federally Obligated Airports but is a private air traffic service provider in the EFSC process.

²⁹¹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 59-60 of 231, Attachment U-4, Section 4.0.

²⁹² NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 58-59 of 231, Attachment U-4, Section 3.0. Red glare: glare predicted with a potential for permanent eye damage (retinal burn); Yellow glare: glare predicted with a potential for temporary after-image; Green glare: glare predicted with a low potential for temporary after-image.

1 The aviation Analysis 3 did not predict glare at any of the 2-mile final approach paths of either
2 airport. This includes no potential for glint or glare in the existing or planned pilots and/or air
3 traffic control facilities and no potential for glare or “low potential for after-image” along the
4 final approach path for any existing landing threshold or future landing thresholds as shown on
5 the current FAA-approved Airport Layout Plan, which are the criteria that would necessitate the
6 submission of Form 7460-1 to the FAA for the solar facility components.²⁹³ Based upon the
7 Council’s review of the applicant’s Glare Analysis, the Council finds that it will not be likely that
8 there will be potential impacts to public and private air traffic providers (airports and pilots)
9 due to the construction and operation of the solar facility components.

11 *Potential Impacts from Helicopter Use During Construction*

13 Potential impacts to public or private providers of air traffic services could result by the
14 applicant’s helicopter use during construction. In ASC Exhibit U and L, the applicant explained
15 that if the 25.3-mile UEC Cottonwood route is selected for the 230-kV transmission line, it will
16 have to be strung across I-84, as shown in the northwest corner of Figure 11: *Preliminary*
17 *Construction Transportation Routes*, in the Traffic Safety Section. To facilitate the spanning of I-
18 84 to connect both sides of the 230 kV transmission line, structures will be placed on either side
19 of I-84 and a helicopter will be used to fly the lines across.²⁹⁴ There will be five lines including
20 the grounding wire, each flown over and secured individually. Further, as indicated in ASC
21 Exhibit J and additional information provided to the ASC, if the 5-mile 230 kV Bonneville Power
22 Administration (BPA) Stanfield transmission line is selected it will likely span the Umatilla River
23 using BPA specifications and standard practices to install the transmission line which could
24 include spanning with a helicopter.²⁹⁵ The location of the Umatilla River crossing/spanning is
25 provided in ASC Exhibit C, Figure C-4.13.

27 Helicopter use during construction of the facility has the potential to intersect with flight paths
28 in and out of public and private airports within the analysis area. The applicant indicated that
29 construction-related helicopter use related to the I-84 crossing will occur over a few hours in
30 one day, and that this work will be coordinated with ODOT and conducted in accordance with
31 provisions of the applicable Permit to Occupy or Perform Operations Upon a State Highway.
32 The applicant explained in ASC Exhibit U, that the applicant’s construction contractor will
33 implement BMPs to minimize impacts from construction-related traffic which include
34 notification to landowners prior to the start of construction near residences. To reduce the
35 potential for construction-related helicopter traffic to impact airports, the Council includes the
36 following revisions to the traffic BMPs be incorporated into the Draft Traffic Management Plan
37 under Public Services Condition 1:

²⁹³ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 57-58 of 231 and 64-65 of 231, Attachment U-4, Section 2.0 and 7.0. The final approach path is defined as 2 miles from 50 feet above the landing threshold using a standard three-degree glidepath.

²⁹⁴ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231, Section 3.2.2.6; and NHWAPPDoc2-11 ASC Exhibit L. Protected Areas_2022-01-31 Page 14-15 of 27, Section 4.2.

²⁹⁵ NHWAPPDoc2-30 ASC Additional Information Package Exhbs B, M,O J, U, DD_2022-03-04

- Notifying landowners prior to the start of construction near residences, including residences within one mile of the site boundary where helicopters would be used for construction.
- Notify airports within 10 miles of the site boundary of construction-related helicopter use.

Based on the findings of fact, conclusions of law, and compliance with the above referenced condition, the Council finds that the facility will not be likely to result in significant adverse impacts on the ability of public and private air traffic service providers to provide service.

IV.M.7. Police Protection

Construction of the facility could result in impacts to police protection providers due to increased activity at the site and increased population and traffic from temporary workers. As presented in ASC Exhibit U, and also discussed above, the applicant anticipated there to be an average of 140 construction workers on site during the 6-18-month construction period with a maximum number of workers during peak construction months that would not be more than 500 people. Of these, the applicant estimated that 30 percent (42 workers during average construction periods and 150 workers during peak construction summer months) of workers will be hired locally and 70 percent of workers (98 workers during average construction periods and 350 workers during peak construction) will be from out of state or will not live locally and will temporarily relocate to the area. Potential impacts from the increase in workers and truck deliveries commuting from outside of the analysis area, during peak worker levels, could include traffic safety risks and an increase in traffic on the roads within the analysis area. Even if all workers temporarily relocated to the analysis area and none were hired locally, the Council finds that the measures below that address concerns of safety impacts will minimize potential impacts to law enforcement agencies within the analysis area.

There may also be an increase in theft associated with access to construction materials at the site. As described in Section III.A.2., *Related or Supporting Facilities*, during construction the applicant will establish one, 27-acre temporary staging area adjacent to the northern substation location, O&M building, and solar site. The staging area will contain field construction offices and be used to store construction supplies and materials and construction equipment when not in use. Temporary batch plants may be located and used at the temporary staging area and facility components may be assembled within the area as well. To ensure safety at the staging area and to prevent access by the public and theft, the applicant stated that the area will be temporarily fenced and will have on-site security staff and have signage marked as private, with no trespassing.²⁹⁶ Further, the O&M Building, substations, solar array, battery energy storage system (BESS), and construction yards will be within fenced enclosures, either enclosed

²⁹⁶ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 29-30 of 51; and NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31. Pages 5-6 of 16.

1 individually or within the larger solar siting area fence line. The solar array enclosure will have
2 at least two gates allowing for emergency vehicle access.²⁹⁷

3
4 The applicant explained that typically turbine and tower components will be delivered directly
5 to each turbine site rather than being received and stored at the construction yards. The site
6 will be temporarily fenced, will be signed as private, with no trespassing and the applicant will
7 have on-site security staff.²⁹⁸ In addition to the central temporary staging area, 8 to 11 smaller
8 temporary staging areas (less than 1,000 square feet each) will be distributed throughout the
9 site to support construction.

10
11 The applicant explained that the primary law enforcement provider that serves the facility site
12 will be the Umatilla County Sheriff's Office. The applicant included a September 2018 letter
13 from the Umatilla County Sheriff as ASC Exhibit U, Attachment U-3, in which the Sheriff stated
14 that they do not see any significant impact to their law enforcement services in the area. Other
15 law enforcement/police protection services in the analysis area include the cities of Hermiston
16 and Stanfield which have their own police departments, but they will not likely respond to an
17 emergency event at the site. Additional law enforcement service is available through the
18 Oregon State Police (OSP), which also has offices in Hermiston and Pendleton. As discussed in
19 the following Section IV.M.7, *Fire Protection*, the applicant proposed and the Council imposed
20 measures to reduce potential impacts to service providers from fires at the facility by
21 recommending the finalization and adherence to a Fire Prevention, Suppression and Emergency
22 Management Plan under Public Services Conditions 7 and 8. In addition to measures that will
23 reduce fire emergencies the Plan also includes measures to address other safety emergencies
24 where the County Sheriff or other law enforcement might be called onsite, therefore, these
25 measures could also reduce any potential impacts to law enforcement providers in the analysis
26 area.

27
28 Facility operations will not be likely to impact law enforcement providers. The applicant
29 estimated approximately 10 to 15 workers will be necessary to operate the facility.²⁹⁹ Some
30 outside contractors may also be required periodically for specialized maintenance tasks, such as
31 turbine inspections, or the repair of nacelles or meteorological equipment. However, it is not
32 anticipated that these workers will increase the security needs from operation of the facility or
33 impact the ability of the Sheriff's Officer to be able to provide law enforcement services during
34 operations.

35
36 Based on the evaluation and findings provided above, the Council finds that the construction
37 and operation of the facility will not be likely to impact law enforcement providers from
38 providing service within the analysis area.

39

²⁹⁷ Id.

²⁹⁸ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 29-50 of 51; and NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31. Pages 5-6 of 16, Section 3.1.

²⁹⁹ NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 7 of 231.

IV.M.8. Fire Protection

Construction and operation of the facility could result in impacts to fire protection providers within the analysis area due to increased fire risk from and to the facility, which are discussed below. The facility would be located in a high-risk zone for wildland fires.³⁰⁰ Facility components including the wind turbines, solar array, transmission line and the battery storage system could result in health and safety impacts from unanticipated fire and electrical hazards. Findings of compliance of how the applicant has demonstrated the ability to design, construct and operate the facility in compliance with site certificate conditions and in a manner that protects public health and safety are provided in Section IV.C., *Organizational Expertise*, and measures required to design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure are provided in Section IV.P.3., *Public Health and Safety Standards for Wind Facilities*.

Construction-related fire risks include accidental fires caused by metal cutting and welding used to construct the steel reinforcing cages for foundations.³⁰¹ Additional construction-related fire hazards could result from workers smoking and vehicle and equipment refueling, and operating equipment off roadways in areas of tall dry grass that could ignite upon contact with hot vehicle parts, particularly in dry seasons. ASC Exhibit U provides a summary of the best management practices (BMPs) that will be implemented during construction to reduce the potential for construction-related fires. The Department compiled these BMPs into a Draft Fire Prevention, Suppression and Emergency Management Plan included as Attachment U-2 to this order. Some of these BMP's include:

- Keeping water trucks on-site to keep the ground and vegetation moist during extreme fire conditions.
- Plan and manage the work and the movement of vehicles. No off-road driving would be done while working alone.
- Smoking would only be allowed in designated smoking areas in the site boundary.
- Each vehicle used on-site would have a fire extinguisher of sufficient type and capacity to suppress small fires around vehicles.
- Prior to start of construction work activities, contact local fire department(s) and advise them of work type, location, and probable duration.

The risks of fires igniting during operation of the facility would vary depending on the type of operating facility component. As noted above, there will be the potential for electrical fires from electrical equipment associated with the wind turbines, solar modules, transmission lines, and the lithium-ion batteries associated with the Battery Energy Storage System (BESS), which are discussed further below:

³⁰⁰ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 45-48 of 231, Attachment U-3. April 2021 letter from Echo Rural Fire Protection District

³⁰¹ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 25-27 of 231.

- Wind turbines: The applicant explained that fires within wind turbines generally occurs from improper maintenance or electrical malfunction. Fires could also be caused by mechanical or electrical factors or by lightning strikes.
- Solar panels and BESS: Electrical equipment associated with the solar and BESS could short-circuit and generate sparking, which could cause fires. The chemicals used in lithium-ion batteries are generally nontoxic but do present a flammability hazard because these batteries are susceptible to overheating and typically require cooling systems dedicated to each BESS enclosure, especially at the utility scale such as the facility.
- 230 kV transmission lines and 34.5 kV collector system: The applicant d that potential fires from the transmission and collector lines may occur from improper maintenance of electrical equipment. Other known fire risks associated with transmission lines that Council has reviewed are associated with improper vegetative maintenance around transmission lines.³⁰²

ASC Exhibit U explains that there are several fire protection agencies within the analysis area including the Echo Rural Fire Protection District, Pilot Rock Rural Fire Protection District, Oregon Department of Forestry Pendleton Unit, Umatilla County Fire District #1, the Stanfield Fire District, the City of Pendleton Fire Department, and the Heppner Rural Fire District in Morrow County, however, the Umatilla County Fire District #1 and Echo Rural Fire Protection District (Echo RFPD) are the fire protection service providers that will serve the facility in case of a fire emergency.³⁰³

ASC Exhibit U, Attachment U-3 included correspondence from the Umatilla County Fire District #1 and Echo Rural Fire Protection District. The letter from Echo RFPD indicated that they do not have concerns about the facility and that they will respond to any fires or provide initial emergency medical responses if required, however they do not provide high angle rescues nor confined space rescues. Echo RFPD indicated that the applicant will conduct a site orientation session prior to, or as soon as possible once operations begin and that, to minimize fire risks to and from the facility, Echo RFPD requested a 100-foot vegetation free zone be maintained around facility structures. As described in Section III.A.1., *Energy Facility* and in ASC Exhibit B, Figure B-4, the applicant maintained there would be an 82-foot diameter permanent disturbance area around each wind turbine which will largely be made up of the turbine foundations. The solar array facility area will be enclosed in a fence line and vegetation will be managed to reduce burnable vegetation. Further described in Section III.A.2., *Related or*

³⁰² BSPAPPDoc2 Final Order 2020-04-24. Bakeoven Solar Project Final Order, Section IV.E. Land Use; and IV.M. Public Services.

³⁰³ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 25-27 of 231., Section 3.2.2.8 explains that the proposed facility site is also within the Pilot Rock Rural Fire Protection District which, as of July 2018, merged with the Umatilla County Fire District #1 and that because the majority of the site is outside the city limits of the city fire departments any emergency fire response will likely be by Umatilla County Fire District #1 and the Echo Rural Fire Protection District, and any assistance by another fire department will be in the service of one of these districts.

1 *Supporting Facilities*, the O&M building, BESS, and substations will be located within permanent
2 impact areas surrounded by gravel which would reduce risks of fire from the facility or outside
3 fires impacting these facility components.

4
5 ASC Exhibit U also includes a letter from the Umatilla County Fire District #1 (UDFD #1) who
6 would be the Ambulance Service Area (ASA) provider supplying ambulance transport service for
7 the western half of the facility site boundary. UDFD #1 also indicated they have automatic and
8 mutual aid agreements for emergency response with all the surrounding fire districts and
9 expects that daily operations will have minimal impact on their operations, yet requests the
10 applicant provide them site safety and emergency response plans when those are
11 updated/developed and implemented. The measures raised by the fire districts and the
12 applicant; onsite training, vegetative clearance areas with a non-combustible base around
13 structures, and being provided copies of fire and safety plans, will reduce potential impacts to
14 these service providers because they will reduce the risk of fires originating and impacting the
15 facility, and will improve fire district personnel training and knowledge of the site and safety
16 programs. Facility design measures are also represented by the applicant as described in the
17 facility description in Section III. To minimize the impacts to fire protection service providers
18 that will serve the facility site, the Council requires the training requests raised by the fire
19 districts, be included, apply to both fire districts, and be imposed under the following Public
20 Services Condition 6 and under Public Services Condition 7, discussed further below.

21
22 **Public Services Condition 6 (PRO):** Prior to operation the certificate holder shall contact
23 the Echo Rural Fire Protection District (Echo RFPD) and Umatilla County Fire District #1
24 (UDFD #1) to schedule an on-site orientation to review facility layout and safety
25 procedures.

26 [PRO-PS-01]
27

28 The applicant provided measures to avoid, minimize and mitigate the potential for fires and
29 other safety risks during facility operation are discussed in ASC Exhibits B, D, U, and DD. There
30 are specific measures that apply to certain facility components, which are discussed below,
31 however, the applicant also discusses design measures and features for roads and the
32 Supervisory Control and Data Acquisition (SCADA) system that relate to the facility as a whole
33 and to wind and solar facility components.

34
35 As discussed in Section III.A.2., *Related or Supporting Facilities*, 43 miles of new permanent
36 access roads and 19 miles of road improvements will be built during construction for the
37 operation of the wind facility. Approximately 18 miles of new permanent access roads will be
38 constructed to access the solar array, BESS, and O&M building within the permanent solar siting
39 area fence line.³⁰⁴ Temporary access roads to the wind turbines will be widened to 82 feet to
40 accommodate crane paths, cut and fill slopes, and any necessary drainage or erosion control
41 features. However, following turbine construction, site access roads will be narrowed for use

³⁰⁴ NHWAPPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 28-29 of 51.

1 during operations.³⁰⁵ Permanent access roads for the wind and solar facility components will be
2 16 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to
3 provide access to emergency vehicles, in accordance with 2019 Oregon Fire Code requirements,
4 including Section 503 and Appendix D - Fire Apparatus Access Roads. All newly constructed and
5 improved site access roads will be graded and graveled to meet load requirements for heavy
6 construction equipment, as necessary.³⁰⁶

7
8 The Supervisory Control and Data Acquisition (SCADA) system consists of fiber optic and copper
9 communication lines that will connect the turbines, met towers solar array, BESS, and
10 substations to a central control computer at the O&M building. The fiber optic lines that
11 connect the components are strung with collector lines either above ground or buried. This
12 system monitors facility components and the met tower data for variables such as
13 meteorological conditions, critical operating parameters, and power output, and allows each
14 component of the system to be monitored and controlled, even remotely, for activity in present
15 time. If an issue occurred with a wind turbine or solar string, it would alert the O&M staff so
16 that the component can be shut down to minimize consequences of failure, fires, and potential
17 safety risks. In the event there is an anomaly with a facility component observed by the SCADA
18 system or during an inspection, the applicant will coordinate with the original equipment
19 manufacturer (i.e., OEM) and further inspection may be carried out by subject matter experts
20 to determine root cause and resulting action required to rectify the issue.

21
22 The applicant represented measures that will reduce the risk of fire during operation that is
23 specific to each facility component are listed below, which the Department also compiled into
24 Attachment U-2, a draft Fire Prevention, Suppression and Emergency Management Plan under
25 Public Services Conditions 7 and 8, below.

26
27 Wind Turbines:

- 28 • The risk of turbine fires will be minimized through proper maintenance of the turbine
29 and its critical mechanical and electrical components. Turbine towers and blades are
30 regularly inspected during annual turbine maintenance activities. These inspections
31 include all turbine related components for irregular wear and may be supplemented
32 with further repair as needed.
- 33 • Turbine models considered will be equipped with internal fire suppression systems in
34 the nacelles.
- 35 • Lightning protection systems would be built into the turbine blades and tower to
36 electrically ground the entire structure and to eliminate the potential for lightning-
37 caused fires.
- 38 • Wind turbines contain fully independent braking systems and emergency shutoff
39 devices safety features designed to provide increased fire protection.
- 40 • Turbines and their foundations are regularly inspected during monthly operating rounds
41 and regular annual turbine maintenance activities. Operating rounds will consist of a

³⁰⁵ NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31. Pages 8-9 of 16.

³⁰⁶ NHWAPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31. Pages 19-20 of 51.

visual assessment of turbine foundations and the materials connecting the turbine to the foundation, as well as observation of SCADA data that provide insight into how the turbine structural components will withstand the stresses applied to them.

- Annual turbine maintenance will include inspections on turbine components, lubrications and replacement of worn parts as necessary.

Transmission lines, 34.5 kV collector system, and substation:

- Proper maintenance and safety checks.
- Substations, collector lines, and other electrical connections will be built to National Electrical Safety Code standards. All collector and transmission lines will be constructed according to National Electrical Safety Code (NESC) standards.

Solar panels and BESS:

- Proper installation and maintenance of electrical equipment will prevent short-circuits and consequent sparking.
- Vegetation management to reduce the chance of fire spreading.
- The solar array will have shielded electrical cabling, as required by applicable code, to prevent electrical fire.
- Vegetation near and under solar panels may be mowed periodically, and weeds will be managed in accordance with the weed management procedures described in the Revegetation Plan (discussed further in Section IV.H., *Fish and Wildlife Habitat*)
- Electrical equipment will meet NESC standards reducing significant fire risk.
- The areas immediately around the O&M Building, substations, and BESS will be graveled, with no vegetation present.
- The batteries will be contained in completely leak-proof modules and stored upon a concrete pad.
- Transportation of lithium-ion batteries is subject to 49 CFR 173.185 – Department of Transportation Pipeline and Hazardous Material Administration. This regulation contains requirements for prevention of a dangerous evolution of heat; prevention of short circuits; prevention of damage to the terminals; and prevention of batteries coming into contact with other batteries or conductive materials.
- Adherence to the requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams will minimize any public hazard related to transport, use, or disposal of batteries.
- The following design practices would apply to the facility:
 - Use of lithium-ion phosphate battery chemistry that does not release oxygen when it decomposes due to temperature;
 - Employment of an advanced and proven battery management system;
 - Qualification testing of battery systems in accordance with UL 9540A (UL 2018);
 - Installation of fire sensors, alarms, and clean agent-based fire extinguishing systems in every battery container (e.g., FM200, Novec 1230);
 - Installation of deflagration venting and/or sacrificial deflagration panels per National Fire Protection Association standards 68 and 69 (NFPA 2020);

- Installation of remote power disconnect switches; and
- Clear and visible signs to identify remote power disconnect switches.

In an additional information package to the ASC, the applicant provided Table of Contents (TOC) documents extracted from its existing operational Emergency Management Plans, one from a wind facility and one from a solar facility. The TOCs outline procedures to reduce safety risks, including fire emergencies, the applicant applied to existing facilities and that will apply to the facility, which the Department included in Attachment U-2, the draft Fire Prevention, Suppression and Emergency Management Plan under Public Services Condition 7 and 8, below. Some of these fire and emergency safety measures are:

- Hazard, Risk, Vulnerability Assessment (HRVA)
- Training and Exercises
- Site status reports to maintain the Plan
- Emergency Responses which include notice, alarms, and public information
- Tactical Response Procedures (TRPs) for
 - Structure fires
 - Evacuations
 - Medical emergencies
 - Severe weather (Tornado, Earthquake, Flood)
 - Wind turbine rescue
 - Prolonged equipment outage
- Emergency Contact information and responses
- On-site emergency equipment

The actions the applicant proposed to reduce potential risks of fire and other safety emergencies will reduce impacts to fire service providers because, if properly maintained and implemented, they will avoid emergencies that would require fire department resources and response. To ensure that these measures are applied during construction and operation of the facility and to reduce impacts to fire service providers, the Council imposes these measures be included in a draft Fire Prevention, Suppression and Emergency Management Plan included in this order as Attachment U-2, in the following conditions. The Council understands that it is likely that the applicant or its construction contractor³⁰⁷ may have its own Fire Prevention, Suppression and Emergency Management Plan, which may be provided if it, at a minimum includes the provisions in the draft Fire Prevention, Suppression and Emergency Management Plan, Attachment U-2.

³⁰⁷ For instance, ASC Exhibit G includes Attachment G-1: Draft Spill Prevention, Control, and Countermeasures Plan (SPCC Plan), which Section 3.0 requires that each construction contractor is required to develop a Contractor's Emergency Response Plan for environmental emergency preparedness and response, which includes measures for emergency response and fire-fighting equipment. To reduce redundancy, the same Emergency Response Plan required in the SPCC Plan may be provided to comply with Public Services Conditions 7 and 8.

1 **Public Services Condition 7 (PRE):** Prior to construction of the facility, or facility
2 component the certificate holder shall:
3 a. Finalize and submit to the Department a Fire Prevention, Suppression and
4 Emergency Management Plan which shall include at a minimum the provisions
5 included in Attachment U-2 of the Final Order on ASC.
6 b. Submit copies of the Final Fire Prevention, Suppression and Emergency
7 Management Plan to the Echo Rural Fire Protection District (Echo RFPD) and
8 Umatilla County Fire District #1 (UDFD #1).
9 [PRE-PS-03]

10
11 **Public Services Condition 8 (OPR):** During operation the certificate holder shall operate
12 the facility consistent with the provisions in the Final Fire Prevention, Suppression and
13 Emergency Management Plan, as approved in Public Services Condition 7. If substantive
14 updates or changes are made to the Plan, submit copies of the updated Plan to the
15 Department and to the Echo Rural Fire Protection District (Echo RFPD) and Umatilla
16 County Fire District #1 (UDFD #1).
17 [OPR-PS-02]

18
19 Based on the findings of fact and analysis provided above and compliance with the above-
20 Public Services Conditions, the Council finds that the construction and operation of the facility
21 is not likely to result in significant adverse impacts to the ability of fire protection service
22 providers to provide fire protection services.

23 24 IV.M.9. Housing

25
26 Potential impacts to public and private housing providers could result if there were an
27 inadequate supply of housing in relation to the demand from the new temporary and
28 permanent residents (workers) associated with the construction and operation of the facility.
29 Examples of public housing providers would be government provided housing, and potentially
30 subsidized housing for low-income people and through a variety of government loans and other
31 incentives. It is not anticipated that temporary or permanent workers associated with facility
32 will use public housing. Examples of private housing options are motels, hotels, trailer or RV
33 parking areas or campgrounds, or house, room or apartment rentals.

34 35 *Construction*

36
37 The applicant anticipates that during the 6–18-month construction period 140 workers would
38 be needed on average and during peak construction approximately 500 workers could be
39 necessary. Of these, the applicant estimated and the Council concurs that 30 percent of these
40 workers (42 during average construction periods and 150 during peak construction summer
41 months) will be hired locally from Umatilla County, potentially from the communities of
42 Pendleton, Hermiston, Stanfield, Umatilla, Echo, and Pilot Rock. This leaves 70 percent of
43 workers (98 during average construction periods and 350 during peak construction) that will
44 temporarily relocate from out of state or other areas in Oregon to the vicinity of the facility for

1 the construction period duration. The 98-350 workers would likely seek housing options within
2 the larger communities of Pendleton, Hermiston and Umatilla.³⁰⁸

3
4 Demand for temporary housing (hotels RV and RV camping) is generally greatest during the
5 tourism season in the summer months, which is also the anticipated busiest construction
6 season to construct the facility. The applicant explained that according to the American Hotel
7 and Lodging Association, hotels in the Oregon 2nd Congressional District, which includes
8 Umatilla and Morrow counties, have an average of 60 rooms per hotel, they then use this
9 average to estimate that Umatilla and Morrow counties have approximately 1,800 hotel and
10 motel rooms available at any given time. The applicant described that, based on data from the
11 Oregon Tourism Commission, the average hotel and motel occupancy rate during the month of
12 August 2019 in Eastern Oregon (comprising 11 counties, including Umatilla and Morrow
13 counties) the occupancy rate was 73 percent. The year-to-date occupancy rate includes the
14 slower seasons and averages year-round occupancy rates for 2019 was 59.1 percent for the
15 Eastern Oregon region. The Department reviewed more recent data from the Oregon Tourism
16 Commission which listed the occupancy rate from March 2021 to February 2022 (12 months)
17 for the Eastern Oregon Region as 61.8 percent.³⁰⁹ Using the highest August of 2019 occupancy
18 rate of 73 percent, and the estimated average of 1,800 hotel and motel rooms, to provide a
19 worst-case occupancy/vacancy rate for hotel rooms for construction workers, there would be
20 approximately 486 rooms available. Using the 2022, 12-month occupancy rate of 62 percent,
21 this would leave approximately 684 hotel and motel rooms available. Under the maximum
22 occupancy estimate and average annual occupancy estimate, for hotels and motels alone, this
23 housing option would be able to house the 350 workers estimated to need temporary housing.
24 If there were no workers hired locally and all workers needed temporary housing, under worst-
25 case peak summer occupancy, housing all 500 workers solely in hotels and motels create an
26 inadequate supply of housing. However, there are other housing options available as discussed
27 below, the Department also highlights that the applicant did not evaluate the possibility of
28 privately owned homes or apartments that could be rented as short-term vacation rentals (i.e.,
29 Airbnb).

30
31 The applicant also evaluated the presence of RV parks, campgrounds or other areas where
32 workers could park mobile housing, stating that over 20 RV parks in Umatilla and Morrow
33 counties.³¹⁰ However, the Department conducted a preliminary desktop review using the
34 Google Maps to located RV parks in only Umatilla County yielded over 30 RV parks and
35 campground where RV trailers could park, the spaces of these parks varied widely from 7 sites
36 to over 50. Occupancy during the summer months at these sites would be higher than during
37 the rest of the year, but it would be anticipated a that some occupancy would be available to
38 accommodate some workers that would travel with an RV or similar trailer.

³⁰⁸ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 10-12 of 231.

³⁰⁹ Oregon Tourism Commission. Statewide-Lodging-Performance-Statistics-for-February-2022-v2. Accessed and downloaded on 03-32022. <https://industry.traveloregon.com/wp-content/uploads/2022/03/Statewide-Lodging-Performance-Statistics-for-February-2022-v2.pdf>

³¹⁰ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 10-12 of 231.

1
2 The applicant provided an evaluation of longer-term rentals such as a house or apartment that
3 may be occupied by temporary workers, especially those who would work for 12-18 months
4 during construction. The applicant explained that the US Census Bureau estimates the number
5 of vacancies by calculating rental units as a percentage of total vacant housing units, which is
6 based on the ratio of renter-occupied dwellings to owner-occupied dwellings. Using this
7 method and 2017 Census data, the applicant estimated that 1,185 housing units would be
8 available for rent in Umatilla County. The Department does not anticipate a large portion of the
9 temporary workforce to secure long term housing or apartment rentals, although this is an
10 option for workers.

11
12 Based on the availability of hotels, motels, RV parks and campgrounds, and house or apartment
13 rentals within Umatilla County, the Council finds there to be sufficient housing available for the
14 70 percent of workers (350 workers) that will travel to the vicinity for the construction of the
15 facility. Further, if zero percent of workers were hired locally and all workers traveled from
16 outside the analysis area, which is not likely, the Department also anticipated there to be
17 sufficient housing options for the maximum number of temporary workers. The Council finds
18 that construction of the facility will not adversely impacts the ability of public and private
19 providers of housing to provide their services.

20 21 *Overlapping Regional Construction Projects Impact on Housing*

22

23 In ASC Exhibit U, the applicant provided a discussion of other EFSC jurisdictional facility that
24 have been approved, are currently under review by EFSC, or are under construction within
25 Umatilla or adjacent counties. The applicant provided estimated number of temporary workers
26 that will be needed for each project and the Department anticipates that if all or several of
27 these projects were to be constructed simultaneously or with overlapping construction periods,
28 this could strain the housing supply in the analysis area. Whereas the impact assessment for the
29 facility under the Council's Public Services standard for housing is focused on this ASC, there
30 could be external circumstances that could create an inadequate supply of housing in the
31 analysis area during the construction period of the facility. These circumstances include
32 simultaneous or overlapping construction of other EFSC energy facilities, as well as other local
33 government or private sector construction projects during summer months when it is also peak
34 tourist season. In these circumstances there could be a measurable impact on the housing
35 sector, where there could be an inadequate supply of housing to accommodate all temporary
36 workers within the analysis area and surrounding communities. Potential impacts from an
37 inadequate supply of housing for temporary workers staying within the area to work on the
38 facility, and other construction projects could be that workers may stay in illegal or
39 inappropriate locations. For instance, if RV parks or all hotel rooms are full, workers may park
40 and stay their RVs or cars in neighborhoods or other local areas which may have law
41 enforcement or waste issues. These types of issues could implicate the County to respond.

42
43 To address the circumstances where several overlapping construction projects in one County
44 impact the availability of housing, and where a County could be left responsible to respond to

the issue, the Department offered the following pathway as a potential solution for the issue. Section IV.E. *Land Use*, states that the applicant elected to have the Council make the land use determination under ORS 469.504(1)(b) and OAR 345-022-0030(2)(b) for the facility. Under this Section, the Council finds the facility, subject to site certificate conditions, complies with applicable substantive criteria from Umatilla County, applicable Land Conservation and Development Commission (LCD) administrative rules and goals, and that an exception be granted to statewide planning goal 3. Because the applicant requested Council review of local applicable substantive criteria, as is allowed under ORS 469.504(1)(b), if approved, Umatilla County may not impose any additional conditions following Site Plan Review or in issuance of a Conditional Use Permit because pursuant to OAR 469.401(3), the County is obligated to issue any necessary permits, following proper submission of application and fees, without hearing or other proceedings, and subject only to the conditions set forth in the site certificate. However, OAR 660-033-0130 under (LCD) rules governs the minimum standards applicable to permitted and conditional uses including power generating facilities and wind power generating facilities and contemplates the need for on-site and off-site facilities for temporary workforce housing for workers constructing a power generation facility. Temporary workforce housing facilities were not included in the applicant's ASC; therefore, this will not be included in Council's review and initial approval of the facility. However, under OAR 660-033-0130(22) temporary workforce housing facilities may be considered through a minor amendment request submitted to the County where the facility is located.³¹¹ Under OAR 660-033-0130 a minor amendment request shall be subject to OAR 660-033-0130(5) and shall have no effect on the original approval (EFSC approval and site certificate). The scope of the local government's review of the minor amendment request to add on-or-off site temporary housing under OAR 660-033-0130(5) would be whether or not the temporary housing forces a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and whether it significantly increases the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.³¹² Therefore, to avoid adverse impacts to public and private service providers of housing in the analysis area from overlapping or concurrent EFSC or other construction projects, the applicant could submit or the County could request the applicant submit a minor amendment request to the County for the County to review options for temporary workforce housing for this or other facilities. Any minor amendment would not affect any EFSC approval or site certificate conditions consequently would be permissible under ORS 469.401(3).

Operation

³¹¹ OAR 660-033-0130(22) addresses temporary workforce housing and minor amendments for permanent features of a power generation facility shall not use, occupy or cover more than 20 acres unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4. OAR 660-033-0130(37) addresses temporary workforce housing and minor amendments for wind power generation facilities.

³¹² OAR 660-033-0130(5) Approval requires review by the governing body or its designate under ORS 215.296. Uses may be approved only where such uses:

- (a) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- (b) Will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

Of the 10-15 permanent employees required for operation of the facility, the applicant assumed some staff (up to 5 personnel) would already reside within the analysis area or within a commutable distance to the analysis area. Even if all operational employees permanently relocated to within the analysis area or within a nearby communities, it is not anticipated to have an impact on housing providers because there would be enough homes for purchase or for rent within the analysis area. Therefore, the Council finds that impacts from the facility operation will not have an adverse impact on housing within the analysis area.

IV.M.10. Healthcare and Schools

Healthcare

Facility construction and operation could result in increased demand of health care providers or impact access to hospitals and health care as a result of on-site medical emergencies or traffic related impacts, particularly during construction. The nearest hospitals are the St. Anthony Hospital located in Pendleton, the Good Shepherd Medical Center in Hermiston, and Pioneer Memorial Hospital located in Heppner, in Morrow County. The nearest Level I trauma centers are located in the City of Portland: Oregon Health & Science University Hospital and Legacy Emmanuel Medical Center. As discussed in Section IV.M.8., *Fire Protection*, ambulance service will be provided by the Umatilla County Fire District #1.³¹³ The health care providers within the analysis area and health care providers that accommodate trauma level services and the distance from the northern site boundary are provided below in Table 21: *Health Care Providers and Distance from Site Boundary*.

Table 21: Health Care Providers and Distance from Site Boundary

Provider	Distance from Northern Site Boundary¹
St. Anthony Hospital, Level IV (Pendleton, Oregon)	19 miles
Umatilla County Fire District #1 (Hermiston, Oregon) ²	19 miles
The Good Shepherd Medical Center Level III (Hermiston, Oregon)	20 miles
Pioneer Memorial Hospital, Level IV (Heppner, Oregon)	50 miles
Legacy Emmanuel Medical Center – Level I (Portland, Oregon)	196 miles
Oregon Health and Science University – Level I Trauma Center (Portland, Oregon)	198 miles
¹ Distances provided are from the unincorporated community of Nolin, Oregon which overlaps with the northern part of the site boundary.	

³¹³ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 27-28 of 231.

Table 21: Health Care Providers and Distance from Site Boundary

Provider	Distance from Northern Site Boundary ¹
² UCDF#1 is the Ambulance Service Area (ASA) provider who provides ambulance transport service to western half of facility. Source: NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31, Section 3.2.2.9.	

Impacts on health care could occur if facility construction or operation activities result in emergencies that necessitate an influx of workers into local hospitals or from an on-site medical emergency that would need several area ambulances which may impact ambulances from serving other emergencies. The applicant explained that impacts on local health care services during both construction and operation will be minimized by implementation of a robust safety program avoid and minimize health and safety risks. The Department compiled emergency and safety measures proposed to avoid fires, hazards, and other on-site emergencies that may include medical emergencies into a draft Fire Prevention, Suppression and Emergency Management Plan under Public Services Condition 7 in Section IV.M.8, *Fire Protection*, of this order. The safety risks and measures to avoid and minimize safety and medical risks on-site identified in the draft Fire Prevention, Suppression and Emergency Management Plan would apply to construction as well as operation of the facility.

Construction-related worker and delivery traffic will increase in traffic near the facility and in the analysis area, which could impact emergency services and access to hospitals and health as a result of traffic congestion or delays. As discussed in Section IV.M.5, *Traffic Safety*, the primary corridors for worker traffic and deliveries will be I-84, I-82, and US Highway 395 (US395), then they will generally follow County Road (CR) 1350 from US-395. CR-1350 (Coombs Canyon Road), and other local county roads, such as CR-1361, CR-1362, CR-1363, and CR-1394, as well as some private roads on leased lands inside the site boundary. Under Public Services Conditions 1 and 2, the Council requires the finalization of the draft Traffic Management Plan which addresses BMP's that would manage traffic congestions and keep traffic flowing, especially for emergency vehicles such as ambulances. Further, as explained in Section IV.M.8, *Fire Protection* and in the draft Fire Prevention, Suppression and Emergency Management Plan required under Public Services Condition 7, proposed roads will be sized for emergency vehicle access in accordance with 2019 Oregon Fire Code requirements and will be 16 to 20 feet wide with an internal turning radius of 28 feet and less than 10 percent grade to provide access to emergency vehicles. This would allow sufficient space for fire and ambulance and any other necessary emergency vehicles to access the site.

Based on the applicant proposed measures to avoid medical and safety emergencies on-site that could impact local ambulance services and hospitals and the proximity and amount of hospital/medical service providers in the analysis area, the Council finds that the construction and operation of the facility will not adversely impact the ability of hospitals and ambulances to provide their services.

Schools

1
2 Construction and operation will impact the ability of schools to provide educational services if
3 the amount of school aged children joining the system impacted the ability of other children to
4 access education. The applicant and Department do not anticipate there to be adverse impacts
5 to schools in the analysis area because construction workers generally do not bring school aged
6 children with them for temporary work, and the if operational personnel enrolled children in
7 schools, it is anticipated that the school district capacity would not be affected. School districts
8 within the analysis area include Hermiston, Stanfield, Pendleton, Echo, Umatilla, Pilot Rock, and
9 Morrow County school districts. According to the Umatilla County Coordinated Human Services
10 Public Transportation Plan, the Mid-Columbia Bus Service provides school bus service to all
11 county public schools on a contract basis in Umatilla County.³¹⁴

12
13 The applicant anticipates that during the 6–18-month construction period 140 workers will be
14 needed on average and during peak construction approximately 500 workers could be
15 necessary. The applicant estimates, and the Department concurs, that 30 percent of these
16 workers (42 during average construction periods and 150 during peak construction summer
17 months) will be hired locally from Umatilla County and 70 percent of workers (98 during
18 average construction periods and 350 during peak construction) will temporarily relocate from
19 other areas for the construction period duration. The applicant explained, and the Department
20 agreed, based on its understanding of large construction projects, that only a small percentage
21 of workers hired from outside the area bring their families and school-age children for a short-
22 term relocation, so the number of additional students added to the school system would be
23 minimal. Peak construction will also occur during the summer months, when school is not in
24 session, therefore when the most workers will be present school will not be provided.³¹⁵ The
25 Department compiled applicant-represented measures to avoid and minimize impacts to traffic
26 service providers into a draft Traffic Management Plan, under Public Services Conditions 1 and
27 2. The applicant explained that the Traffic Management Plan will address such issues as
28 flagging, signage, and traffic flow around work sites on public roads; timing of
29 oversize/overweight truck loads and road closures to avoid impacts to school bus schedules or
30 during peak travel hours.

31
32 The number of new permanent resident employees is not expected to exceed 15 people, some
33 of which may move school-aged children. Given the number of schools in the locations where
34 new residents are likely to settle, and the small number of new school children that may move
35 to the area, it is anticipated that the school districts will be able to enroll and educate these
36 youth without it impacting their ability to enroll and educate other students.

37
38 Because construction workers are not likely to bring families with school-aged children with
39 them during construction of the facility, and fewer operational workers with families are
40 anticipated to move and enroll children in schools in the analysis area, the Council finds that

³¹⁴ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Pages 28-29 of 231.

³¹⁵ Id.

1 construction and operation of the facility is not likely to adversely impact the ability of schools
2 in the analysis area to provide their services.

3
4 **Conclusions of Law**

5
6 Based on the foregoing analysis, and in compliance with OAR 345-022-0110(2), the Council
7 include the above referenced conditions in the site certificate to meet the Council's Public
8 Services Standard.

9 **IV.N. Waste Minimization: OAR 345-022-0120**

10
11 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
12 *Council must find that, to the extent reasonably practicable:*

13
14 *(a) The applicant's solid waste and wastewater plans are likely to minimize*
15 *generation of solid waste and wastewater in the construction and operation of the*
16 *facility, and when solid waste or wastewater is generated, to result in recycling and*
17 *reuse of such wastes;*

18
19 *(b) The applicant's plans to manage the accumulation, storage, disposal and*
20 *transportation of waste generated by the construction and operation of the facility*
21 *are likely to result in minimal adverse impact on surrounding and adjacent areas.*

22
23 *(2) The Council may issue a site certificate for a facility that would produce power from*
24 *wind, solar or geothermal energy without making the findings described in section (1).*
25 *However, the Council may apply the requirements of section (1) to impose conditions on*
26 *a site certificate issued for such a facility.*

27 ***

28
29 **Findings of Fact**

30 ASC Exhibit V presented the applicant's representations about sources, quantities and its plans
31 to minimize impacts and generation of waste and wastewater from construction, operation,
32 and retirement of the facility.

33
34 *Construction*

35
36 *Solid Waste*

37
38 Facility construction is anticipated to produce 13,000 to 16,000 total cubic yards (cy) of waste,
39 including scrap metal (e.g., wire and rebar scraps), wood, concrete, concrete washout, packing
40 materials (such as crates, pallets, and protective and paper wrapping), dirt and rock spoils.
41 Concrete waste will be limited to washout from the concrete truck chutes and other equipment
42 following pouring for foundations of turbines, Operations and Maintenance (O&M) building,

1 substations, battery energy storage system, inverters/transformers foundations, and solar array
2 tracker posts. The excavation of turbine foundations and installation of solar array tracker posts
3 will produce dirt and rock spoils that will require disposal due to the volume of dirt and rock
4 produced.³¹⁶

5
6 Waste and recycled materials will be hauled offsite to Columbia Ridge and Finley Buttes
7 Landfills³¹⁷ by licensed waste haulers who will be required to comply with OAR 340-093-0220
8 for transportation of waste.³¹⁸ Columbia Ridge Landfill is located in Arlington, OR and accepts
9 non-hazardous construction debris, industrial and special waste but does not accept hazardous
10 waste and is designed to meet or exceed the Oregon Department of Environmental Quality
11 (DEQ) and the US Environmental Protection Agency.³¹⁹ Finley Buttes Landfill is located in
12 Boardman, OR and also accepts any non-hazardous construction and industrial waste, including
13 non-hazardous contaminated soils. In a letter from Finley Buttes Landfill provided in ASC, they
14 indicated that some wastes require prior approvals through their Special Waste process, but
15 that should not impact their ability to accept facility-related waste.^{320,321} According to their
16 webpage, Finley Buttes Landfill is a modern municipal solid waste disposal facility permitted by
17 the Oregon DEQ and is in full compliance with Oregon DEQ rules and regulations.³²² While both
18 facilities offer some limited recycling programs, neither advertise recycling of construction
19 waste or specialized recycling of facility components such as turbine blades or solar panels.

20
21 The applicant's Exhibit V focused on the waste minimization of construction-related waste for
22 wind turbines and the wind generating component of the facility but did not specifically
23 consider the waste stream associated with the construction of the solar component (consisting
24 of up to 816,812 solar modules) of the facility. Nonetheless, waste sources identified are
25 assumed to be similar for wind and solar facility components including: packaging of
26 components, excavated soils, metals and concrete waste. For wind components, the applicant's
27 proposed management of construction waste includes collection at each turbine location,
28 followed by consolidation into labeled, appropriately sized disposal and recycling containers
29 with lids, located at construction yards. The applicant stated that soils and rock spoils will be
30 reapplied within temporary disturbance areas, used as fill, or removed and disposed of offsite.
31 Prior to any offsite disposal of spoils, applicant affirmed that contractors will be required to

³¹⁶ NHWAPPDoc2-21 ASC Exhibit V Waste 2022-01-31. Pages 6-7 of 18.

³¹⁷ NHWAPPDoc2-21 ASC Exhibit V. Waste_2022-01-31. Page 9 of 18.

³¹⁸ OAR 340-093-0220 provides provisions for Collection and Transfer Vehicles including loading and operating to prevent dropping, leaking, sifting, or blowing, cleaning vehicles, and proper disposal of wastewater.

³¹⁹ Waste Management Solutions. Columbia Ridge Landfill. Accessed by the Department at:
<https://www.wmsolutions.com/locations/details/id/248> Date Accessed: 2022-03-15.

³²⁰ NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31. Page 35-41 of 231, Attachment U-1.

³²¹ OAR 340-093-0190 identifies wastes that require special handling or management practices and shall not be deposited at a solid waste disposal site unless special provisions for such disposal are included in a Special Waste Management Plan maintained by a disposal site or landfill. Some of these wastes include construction and demolition materials and oil wastes.

³²² Waste Connections Company, Finley Buttes Landfill. Accessed by the Department at:
<https://www.finleybutteslandfill.com/services/> Date Accessed: 2022-03-15.

1 obtain a disposal agreement with landowner and conduct an evaluation of, and avoid, any
2 disposal sites containing sensitive resources.³²³

3
4 The applicant represented that, to minimize solid waste during construction, contractors will be
5 required to submit a plan to address: how solid waste materials would be reused, recycled or
6 disposed of; the number and types of waste containers to be maintained onsite; the process for
7 segregating recyclable and waste materials; and, the names and locations of appropriate
8 recycling and waste disposal facilities, collection and hauling requirements. The applicant also
9 represented that construction waste will be minimized by estimating material needs and
10 employing efficient construction practices.

11 *Wastewater*

12
13
14 Facility construction is anticipated to produce wastewater from concrete washout, including
15 soil berms and concrete solids; vehicle cleaning; dewatering discharge; and sanitary
16 wastewater. The applicant quantified the potential wastewater from concrete washout at up to
17 1,018 gallons per day or 549,905 gallons per year (based on 25% of total water used during
18 foundation construction). The applicant's proposed management of construction wastewater
19 included burying the concrete washout water as part of backfilling foundations. Concrete
20 pouring can contribute suspended solids and heavy metals to stormwater runoff and cause pH
21 increases in receiving waters.³²⁴ For this reason, any on-site concrete or washout disposal must
22 be conducted in accordance with OAR 340-093-0080 which requires DEQ approval of a permit
23 exemption for materials substantially similar to clean fill; and infiltration and evaporation in
24 accordance with a DEQ-issued NPDES 1200-C permit. DEQ recommends the use of an
25 infiltration pit or tank to capture and hold concrete washout as a method for capturing and
26 neutralizing high pH materials to prior to any disposal.³²⁵ Sanitary wastewater will be managed
27 by a licensed subcontractor. Applicant affirmed that wastewater generated onsite will not
28 affect streams, wetlands or groundwater supplies.

29
30 The Council finds that the applicant has adequately evaluated construction waste and
31 wastewater sources and management methods; and its plans to minimize waste and
32 wastewater. The Council imposes the following conditions to ensure the waste and wastewater
33 impacts are minimized, via recycling and proper disposal:

34
35 **Waste Minimization Condition 1 (PRE):** Prior to construction of the facility, facility
36 component or phase, as applicable, the certificate holder shall require contractors to
37 develop and submit to the Department for review and approval, Construction Waste
38 Management Plan(s) that, at a minimum, include the following:

³²³ NHWAPDoc2-21 ASC Exhibit V Waste 2022-01-31. Page 7 of 18.

³²⁴ Oregon Department of Environmental Quality. Construction Stormwater Best Management Practices Manual. 1200-C NPDES General Permit. Water Quality Permitting Department. 2021-02-01, p. 50.

³²⁵ Oregon Department of Environmental Quality. Construction Stormwater Best Management Practices Manual. 1200-C NPDES General Permit. Water Quality Permitting Department. 2021-02-01, p. 50.

- 1 a. All sources and quantities of construction waste and wastewater, including damaged
2 or dysfunctional energy facility components, and where feasible, estimated
3 quantities that can be recycled.
4 b. Process for disposal and recycling, including use of licensed haulers and
5 disposal/recycling facilities; names and locations of licensed recycling and disposal
6 facilities; collection, hauling and tracking requirements.
7 c. Requirements for securing landowner disposal agreement and evidence of
8 evaluation and avoidance of sensitive resources if offsite spoil disposal is necessary.
9 d. Process for requesting a permit exemption from DEQ pursuant to OAR 340-093-0080
10 to ensure that concrete washout materials reused in foundation backfill are
11 substantially the same as clean fill.
12 e. Process for training workers and tracking compliance with the requirements of the
13 plan.
14 [PRE-WM-01]

15
16 **Waste Minimization Condition 2 (CON):** During construction of the facility, facility
17 component or phase, as applicable, the certificate holder shall require that contractors
18 adhere to the requirements of the Construction Waste Management Plan(s) and
19 maintain records of employee training and tracking compliance onsite and available
20 upon Department request.
21 [CON-WM-01]

22
23 **Waste Minimization Condition 3 (CON):** During construction, on-site concrete
24 washwater disposal is prohibited unless DEQ approval of a permit exemption for
25 materials substantially similar to clean fill is obtained. If DEQ approval of a permit
26 exemption is obtained, concrete washwater must be disposed of onsite via infiltration
27 and evaporation in accordance with a DEQ-issued NPDES 1200-C permit.
28 [CON-WM-02]

29
30 Waste Minimization Condition 1 is based on the applicant's representation to estimate, manage
31 and minimize construction-related waste and wastewater impacts; the other conditions were
32 recommended by the Department to afford the Department and applicant an ability to track
33 and demonstrate compliance with the condition and satisfy the intent of the Waste
34 Minimization standard.

35 36 *Operation*

37 38 *Solid Waste*

39
40 Facility operations are anticipated to produce waste from replacement of energy facility
41 components (i.e., turbine blades, solar panels and batteries). These components will be
42 electronically disconnected and removed by maintenance crews or qualified contractors.
43 Replacement of facility components will be delivered and installed which will have associated
44 packaging and materials that will be recycled and hauled offsite by a licensed hauler and

1 disposed of or recycled offsite at a licensed facility. The O&M operations will generate waste
2 typical of a small office, which will be separated and recycled and waste will be collected and
3 hauled offsite by a licensed hauler and disposed of offsite at a licensed facility. Turbine blades
4 and solar panels will be recycled to the extent feasible. Lead-acid and the lithium-ion batteries
5 associated with the BESS, batteries will be hauled offsite by a licensed hauler, in compliance
6 with any applicable federal transportation regulations, and disposed of offsite at a licensed
7 battery recycling facility.³²⁶

8
9 To ensure the applicant establishes a plan or protocol that will minimize waste associated with
10 replaced solar panels during operations and to support to the maximum extent practicable,
11 recycling or reuse of solar panels based on available licensed facilities or programs at the time
12 of replacement, the Council imposes the following conditions:

13
14 **Waste Minimization Condition 4 (PRO):** Prior to operation of solar facility components,
15 the certificate holder shall develop a Solar Panel Recycling Plan or protocol requiring
16 that damaged or nonfunctional panels be recycled through the Solar Energy Industries
17 Association National PV Recycling Program (or similar program), to the extent
18 practicable. The certificate holder shall report in its annual report to the Department the
19 quantities of panels recycled, reused or disposed of in a landfill.
20 [PRO-WM-01]

21
22 **Waste Minimization Condition 5 (OPR):** During operation of solar facility components,
23 the certificate holder shall adhere to the requirements of the Solar Panel Recycling Plan
24 or protocol developed under Waste Minimization Condition 4.
25 [OPR-WM-01]

26
27 Further, for wind facility component replacement during operations, the Council imposes the
28 following condition that will require the applicant to ensure its third-party contractors reuse or
29 recycle wind turbine blades, hubs and other removed wind turbine components, to the extent
30 practicable, and that the applicant demonstrate that the recycling or disposal facility selected
31 to receive turbine parts is licensed. These measures address the applicant's plans to manage
32 the accumulation, storage, disposal and transportation of waste generated during operation
33 and will have a minimal adverse impact on surrounding and adjacent areas.

34
35 **Waste Minimization Condition 6 (OPR):** During operation of wind facility components,
36 the certificate holder shall ensure its third-party contractors reuse or recycle wind
37 turbine blades, hubs and other removed wind turbine components, to the extent
38 practicable. The certificate holder shall demonstrate that the recycling or disposal
39 facility selected to receive turbine parts is licensed. The certificate holder shall report in
40 its annual report to the Department the quantities of removed wind turbine
41 components recycled, reused, sold for scrap, or disposed of in a landfill.
42 [OPR-WM-02]

³²⁶ NHWAPPDoc2-21 ASC Exhibit V Waste 2022-01-31 Page 9 of 18.

Wastewater

Facility operations will produce wastewater from solar panel washing and nontoxic ionized solution (if flow battery technology is selected for the proposed BESS). Water for washing solar panels will require an estimated one gallon per solar module, for a total of approximately 1,120,000 gallons per year during operations.³²⁷ The applicant represented that the solar panel wash water will not contain solvents and will be discharged via evaporation and seepage into the ground. The nontoxic ionized solution will be hauled offsite by a licensed hauler and disposed of offsite at a licensed facility.

The Council finds that the applicant has adequately evaluated operational wastewater sources and management methods; and its plans to minimize wastewater. The Council imposes the following condition to ensure that operational wastewater impacts are minimized on surrounding and adjacent areas:

Waste Minimization Condition 7 (OPR): During operation of the solar facility components, the certificate holder shall:

- a. Prohibit use of chemicals, soaps, detergents and heated water unless Chemical Safety Data Sheets for low volatile organic compound/biodegradable cleaning chemicals and solvents are submitted to the Department for review and approval prior to use.
- b. Ensure that pressure washing is conducted in a manner that does not remove paint or other finishes.
- c. Discharge wash water through evaporation and infiltration only.

[OPR-WM-03]

Conclusions of Law

Based on the foregoing analysis, conditions of approval, and in compliance with OAR 345-022-0120(2), the Council includes the conditions listed above in the site certificate to address the Council's Waste Minimization Standard.

IV.O. Division 23 Standards

The Division 23 standards apply only to "nongenerating facilities" as defined in ORS 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The facility is not a nongenerating facility as defined in statute, and therefore Division 23 is inapplicable to this application for site certificate.

IV.P. Division 24 Standards

³²⁷ NHWAPPDoc2-14 ASC Exhibit O. Water Req_2022-01-31 Page 7-9 of 17.

1 The Council's Division 24 standards include specific standards for siting facilities including wind,
2 underground gas storage reservoirs, transmission lines, and facilities that emit carbon dioxide.
3 The applicable Division 24 specific standards for the proposed Nolan Hills Wind Facility are OAR
4 345-024-0010, Health and Safety Standards for Siting Wind Facilities; OAR-24-0015 Cumulative
5 Effects Standard for Wind Energy Facilities; and OAR 345-024-0090, Siting Standards for
6 Transmission Lines.

7
8 IV.P.1. Public Health and Safety Standards for Wind Energy Facilities: OAR 345-024-0010
9

10 *To issue a site certificate for a proposed wind energy facility, the Council must find that*
11 *the applicant:*

- 12
13 *(1) Can design, construct and operate the facility to exclude members of the public from*
14 *close proximity to the turbine blades and electrical equipment.*
15 *(2) Can design, construct and operate the facility to preclude structural failure of the*
16 *tower or blades that could endanger the public safety and to have adequate safety*
17 *devices and testing procedures designed to warn of impending failure and to*
18 *minimize the consequences of such failure.*
19

20 **Findings of Fact**
21

22 For a proposed wind energy facility, the Council must evaluate an applicant's proposed
23 measures to exclude members of the public from proximity to the turbine blades and electrical
24 equipment, and the applicant's ability to design, construct and operate the proposed facility, to
25 prevent structural failure of the tower or blades and to provide sufficient safety devices to warn
26 of failure.

27
28 As described in Section III.A., *Facility* and throughout this order, the facility will include solar PV
29 and wind energy generation components; battery storage; and grid-interconnection
30 transmission lines. The Public Health and Safety Standards for Wind Energy Facilities was
31 implemented to address public health and safety for wind energy generation components –
32 therefore, the findings of fact, reasoning and conclusions below are based on an evaluation
33 specific to wind energy generation components including wind turbines (blades and tower
34 structures); pad-mounted transformers; 34.5-collection lines (above- and belowground);
35 generator step-up transformers and substations; meteorological towers; and SCADA and O&M
36 building and does not apply the requirements of the standard to the grid-interconnection
37 transmission lines, solar PV energy generation, or battery storage components.
38

39 *Potential Impacts to Public Health and Safety from Construction and Operation of the Facility*
40

41 The facility will include up to 112 wind turbines, each with three blades, with a rotor diameter
42 up to 459 feet constructed on spread-footing, bedrock, or other foundation type. The maximum

blade tip height is 496 feet and the minimum blade tip clearance is 36.5 feet.³²⁸ Electrical equipment includes above- and below-ground 34.5-kV collector lines, Substation Connector Transmission Line and substation; and oil-containing pad-mounted transformers (PMTs).³²⁹ The facility site includes public and private roads; however, the wind facility components will be located entirely on privately owned land.

Impacts to the health and safety of the public from the construction and operation of the wind turbines could include structural, mechanical failures, electrical fires, or fire caused by lightning.³³⁰ Other potential impacts to the public from the construction and operation of the facility include structural failure risks such as a collapsed turbine towers (tower failure) or thrown blades. Tower failure during facility operations most commonly occurs due to faulty construction, material defects, or improper design, where other turbine failures can occur from improper maintenance or early material degradation.³³¹ Public health and safety impacts from the construction and operation of electrical equipment including the substation and pad-mounted transformers could occur if the public is impacted by spills or leaks, electrical fires, or equipment failure that would impact the operation of the wind turbine. These safety risks to the public and measures to avoid and minimize them are discussed further in the section below.

Other possible impacts to the health and safety of the public originating from the construction and operation of the collector lines and transmission lines could occur from electrical fires or public contact with these facilities. The 89 miles of underground collector line associated with the wind facility components would be located on private lands so it is not anticipated that the public would have access to create a health or safety risk. As footnoted in Section IV.P.3., *Siting Standards for Transmission Lines*, the 9.1 miles of 34.5 kV aboveground collector line will be located on private property; therefore, these collector lines will be located in an area not accessible to the public, avoiding risks to the public. Also in this section, the Substation Connector Line is anticipated to operate in compliance with OAR 345-024 -0090, which designates a threshold for electric fields associated with transmission lines. To avoid public access to the 230-kilovolt (kV) transmission line(s) the applicant explained that it will utilize overhead poles that will inhibit climbing by members of the public.³³² Further in Section IV.M.8., *Fire Protection*, under Public Services Condition 7, will require the finalization and implementation of a Final Fire Prevention, Suppression and Emergency Management Plan that includes measures to construct and operate electrical equipment, including the transmission lines, in a manner that avoid safety hazards.

³²⁸ NHWAPPDoc2-1 ASC Exhibit B. Project Desc_2022-01-31

³²⁹ A typical wind turbine configuration is provided in ASC Exhibit B Figure B-1; a typical turbine site plan view is provided in ASC Exhibit B Figure B-4.

³³⁰ NHWAPPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31 Page 6-7 of 16.

³³¹ *Id.*

³³² NHWAPPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31 Page 5-6 of 16.

1 The applicant also identified that wind turbines and transmission lines could increase both the
2 difficulty and risks to aerial spraying (crop dusters), which is an accepted farm practice within
3 the surrounding area and discussed further in Section IV.E., *Land Use*.³³³ Similarly, the Council's
4 findings related to potential impacts to adjacent airports and aircraft operators from the
5 construction and operation of the wind turbines and transmission lines in as Section IV.M.5.,
6 *Public Services; Air Traffic*. The closest airport to the wind facility components is approximately
7 8 miles away, and the location of the transmission line would be 3.4 miles away. The Oregon
8 Department of Aviation (ODA) reviewed the height and location of the tallest proposed facility
9 structures and indicated that they did not believe proposed structures within the micro-siting
10 corridor will result in any hazards to navigable airspace and that the turbines appear to also be
11 well outside the 3-nautical mile perimeter of nearby airports. Therefore, it is not likely that
12 normal operation of the turbines and transmission line, as well as any risks of collapsed
13 turbines or thrown blades, will impact navigable airspace or airports. As required under Public
14 Services Public Services Condition 3, the applicant will be required to submit to the Federal
15 Aviation Administration (FAA) a Form 7460-1 to ODA and the FAA, to determine if any
16 supporting facilities or structures would pose an obstruction to aviation navigation, and the
17 determination or conclusions from the ODA and FAA will be submitted to the Department and
18 ODA.

19 20 *Excluding Public Access from Proximity to Wind Turbines and Electrical Equipment*

21
22 As provided above, the wind facility components including the wind turbine towers, blades and
23 transformers will be located on privately owned lands, which will preclude public access to
24 these components. The wind turbines will not be within a fenced area on the landscape,
25 however access to each turbine tower will be limited with locked steel door and the minimum
26 ground-to-blade clearance would be 36.5 feet which will limit impacts to the public that may
27 access the facilities. As discussed in Section IV.M.5., *Traffic Safety*, the applicant will construct
28 roads used for construction and operation, as well as use existing public roadways for the
29 construction and operation of the facility. During construction, gates will be installed on access
30 roads to reduce unauthorized access when requested by property owners, and access roads
31 developed or improved for the purposes of operation will be gated and locked when not
32 actively in use in coordination with private landowners.³³⁴ To address concerns of turbine
33 blades dropping or tower failure from malfunctioning wind turbines, the applicant indicated
34 that it would comply with a minimum setback of 110 percent of the maximum blade tip height
35 from public roads, which will be a minimum of 546-foot setback from public roads. Setbacks
36 from public roads and from residences that are non-project participants are discussed further in
37 Section IV.E., *Land Use*, and under recommended Land Use Condition 4, which requires that all
38 wind turbines be sited to adhere to a setback equivalent to 110% of the overall tower-to-blade
39 tip height from the boundary of county road, state and interstate highway rights-of-way
40 boundaries.

³³³ NHWAPDoc2-10 ASC Exhibit K. Land Use_2022-01-31 Page 16-18 of 158.

³³⁴ NHWAPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31 Page 5-6 of 16; and NHWAPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231.

1
2 ASC Exhibits B and DD explained that the facility substations will be enclosed within a fence line
3 with locked gates to manage access to equipment with signs labeled private, no trespassing.
4 The northern substation will be enclosed in the same fence line as the O&M building, solar
5 array and BESS, which will limit public access to these related or supporting facilities. Therefore,
6 public access to electrical equipment and any safety or spills associated with that equipment
7 will be avoided by proper security measures. As discussed in Section III.A.1., *Energy Facility*, a
8 generator step up transformer will be necessary for each wind turbine and may be nacelle-
9 mounted or pad mounted. If pad-mounted transformers are selected, these will be located at
10 the base of the tower and will be enclosed in rectangular cases and protected from collisions by
11 bollards.

12
13 The Council finds that, for the wind energy facility components, the applicant has demonstrated
14 that it can design, construct, and operate the facility to exclude members of the public from
15 close proximity to the turbine blades and electrical equipment because the facility is largely
16 located on private lands and the applicant proposed design measures, such as fencing and gates
17 that will sufficiently exclude the public from accessing the wind turbines and other electrical
18 equipment.

19
20 *Design, Construct and Operate Facility to Prevent Structural Failure and Adequate Safety*
21 *Devices and Testing Procedures*
22

23 Structural failures of the towers, foundations, or blades that could endanger the public safety
24 are those listed in the beginning of this section and include tower collapse, blade throws,
25 equipment failure and electrical fires. The applicant explained that prevention of structural
26 failure of wind turbines includes designing, engineering, and constructing the wind turbines to
27 meet or exceed all current applicable standards.³³⁵ This includes avoiding dangers to human
28 safety and non-seismic hazards including conducting site-specific geotechnical evaluations for
29 the facility components to inform operational design and construction techniques. In Section
30 IV.C., *Structural Standard*, the Council finds the applicant adequately characterized the
31 potential seismic, geological (landslides) and soil hazards (erosion) of the site, and that the
32 applicant can design, engineer and construct the facility to avoid dangers to human safety and
33 the environment from these hazards. To inform and ensure that the facility is designed to
34 provide suitable subsurface information based on the soil Site Class, to ensure that current
35 code and design standards are used, and that Quaternary faults will be considered active and
36 included in the site-specific hazard analysis, the Council imposes Structural Standard Condition
37 1 which requires a site-specific geotechnical investigation be conducted prior to construction, in

³³⁵ According to 2016 Occupational Safety and Health Administration (OSHA) guidance policy for Process Safety Management (PSM) Standard's recognized and generally accepted good engineering practices (RAGAGEP) apply to process equipment design and maintenance; inspection and test practices; and inspection and test frequencies and are the basis for engineering, operation, or maintenance activities and are themselves based on established codes, standards, published technical reports or recommended practices or similar documents. OSHA Recognized and Generally Accepted Good Engineering Practices 2016-05-11, <https://www.osha.gov/laws-regs/standardinterpretations/2015-06-05-0>. Accessed 04-13-2022.

1 coordination with the Department and Department of Geology and Mineral Industries
2 (DOGAMI). The resulting geotechnical report will be used to calculate the bearing capacity of
3 the soils, conduct stability analyses, and provide engineering recommendations for
4 construction of the foundations and structures. Further, Structural Standard Condition 2
5 imposes mandatory condition designated under OAR 345-027-0020(12), which requires the
6 applicant to design, engineer and construct the facility to avoid dangers to human safety and
7 the environment presented by seismic hazards affecting the site that are expected to result
8 from all maximum probable seismic events.

9
10 The applicant explained that turbines and materials are tested during and after the
11 construction process to verify proper installation, and that continued safe operation depends
12 on monitoring how the structures and foundations respond to design or unusual stresses, such
13 as rotational, axial, torsion, bending, and vibration stresses, which could occur during extreme
14 weather or seismic events or from operational malfunctions.³³⁶ The applicant will conduct
15 monthly inspections which include operating rounds which will consist of a visual assessment of
16 turbine foundations and the materials connecting the turbine to the foundation, as well as
17 observations of SCADA data that provide insight into how the turbine structural components
18 are withstanding the stresses applied to them. Annual operating inspections and turbine
19 maintenance includes inspections on turbine components, lubrications and replacement of
20 worn parts as necessary, which include all turbine related components for irregular wear and
21 may be supplemented with further repair as needed. Further, the SCADA system monitors
22 facility components and the met tower data for variables such as meteorological conditions,
23 critical operating parameters, and power output, and allows each component of the system to
24 be monitored and controlled, even remotely, for activity in present time. In the event an
25 anomaly is observed by the SCADA system, or during an inspection, or during operation,
26 original equipment manufacturer and engineering is advised, and further inspection may be
27 carried out by subject matter experts to determine root cause and resulting action required to
28 rectify the issue.

29
30 To capture and implement the applicant's discussions of monthly and annual inspections,
31 testing, maintenance, and reporting on the performance of wind foundations, towers, blades,
32 nacelle, pad-mounted transformers, and SCADA system, the Council requires that the applicant
33 develop and adhere to an operational safety-monitoring program in Public Health and Safety
34 Standards for Wind Facilities Condition 1. The operational safety-monitoring program required
35 elements include conducting inspections and testing of wind facility components consistent
36 with manufacturers' recommendations and recognized and generally accepted good
37 engineering practices (RAGAGEP), and maintaining records of such inspections and tests.
38 Records generated from the operational safety-monitoring program will include details that will
39 be provided to the Department upon request, and a summary will be included in the annual
40 report required under OAR 345-026-0080, which is detailed further in Section I.V.A., *General*
41 *Standard of Review*. The operational safety-monitoring program also includes notification and
42 documentation procedures in the event of a significant event such as blade or tower failure,

³³⁶ NHWAPPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31 Page 6-7 of 16.

1 structural or electrical issue that causes fires. Therefore, to demonstrate that the applicant can
2 design, construct and operate the facility to preclude structural failure of wind facility
3 components that could pose a danger the safety of the public safety, and to ensure that the
4 applicant's safety devices and testing procedures are adequately designed to warn of future
5 failures, and to minimize the consequences of component failures, the Council requires the
6 applicant deploy an operational safety-monitoring program, imposed by the below conditions:
7

8 **Public Health and Safety Standards for Wind Facilities Condition 1 (PRO):** Prior to
9 operation, the certificate holder shall submit to the Department the operational safety-
10 monitoring program elements described in Public Health and Safety Standards for Wind
11 Facilities Condition 1(a).
12 [PRO-PH-01]
13

14 **Public Health and Safety Standards for Wind Facilities Condition 2 (OPR):** During
15 operation, the certificate holder shall develop and implement an operational safety-
16 monitoring program that includes regular inspections, maintenance, and reporting
17 program to prevent structural or electrical failure of wind turbine foundations, towers,
18 blades, or electrical equipment. Required elements of the operational safety-monitoring
19 program include:

- 20 a. Identify and conduct inspections and testing of wind facility components, including
21 but not limited to foundations, towers, blades, nacelle, pad-mounted transformers,
22 and SCADA system, consistent with manufacturers' recommendations and
23 recognized and generally accepted good engineering practices (RAGAGEP) for
24 frequency and process.
- 25 b. Maintain records of each inspection and test performed. Records shall:
 - 26 i. Identify the date of the inspection or test, the name of the person who
27 performed the inspection or test, the serial number or other identifier of the
28 equipment on which the inspection or test was performed, a description of
29 the inspection or test performed, and the results of the inspection or test.
 - 30 ii. Identify testing or inspection results that show deficiencies in equipment or
31 operation issues that are outside acceptable limits or recommendations
32 identified by the manufacturer. These issues must be corrected before
33 further use, or in a safe and timely manner if precautions are taken to assure
34 safe operation.
 - 35 iii. Be made available for inspection by the Department's Compliance Officer
36 during site visits, or upon request from the Department. A summary report
37 of the annual inspections, testing and maintenance activities performed shall
38 be submitted to the Department pursuant to OAR 345-026-0080 in the
39 facility's annual compliance report. The summary report shall include the
40 details of the replacement of any system components which could impact
41 the structural integrity of foundations, towers and blades.
- 42 c. In the event of blade or tower failure, a structural or electrical issue that causes a
43 fire or other safety hazard the certificate holder shall report the incident to the

1 Department within 72 hours, in accordance with OAR 345-026-0170(1), and shall,
2 within 30 days of the event, submit a report which contains:

- 3 i. A discussion of the cause of the reported incident including results of on-site
4 or remote inspections or investigations;
- 5 ii. A description of immediate actions taken to correct the reported conditions
6 or circumstances; and
- 7 iii. A description of actions taken or planned to minimize the possibility of
8 recurrence and a description of manufacturers' recommendations and
9 recognized and generally accepted good engineering practices to avoid
10 instances in the future.

11 [OPR-PH-01]

12
13 As described above, OAR 345-024-0010(2) requires the Council to find that the certificate
14 holder can design, construct and operate the facility to preclude structural failure of the tower
15 or blades that could endanger public safety. In other words, the Council must evaluate if the
16 certificate holder has demonstrated that it has the ability to preclude a structural failure in the
17 first place through design, construction and operation of the turbines. OAR 345-024-0010(2)
18 does not establish a minimum setback requirement nor require that a certificate holder
19 demonstrate an *elimination* of all public health and safety risk [*Emphasis added*]. Instead, it
20 requires that the certificate holder design, construct and operate the facility to avoid structural
21 failure, to have adequate mechanisms in place to warn of an impending failure, and to minimize
22 the consequences of such failure.

23 24 **Conclusions of Law**

25
26 The Council finds that, based on compliance with conditions and the evidence in the ASC, the
27 applicant has demonstrated an ability to design, construct, and operate the facility in
28 compliance with OAR 345-024-0010, the Public Health and Safety Standards for Wind Energy
29 Facilities.

30 31 **IV.P.2. Cumulative Effects Standard for Wind Energy Facilities: OAR 345-024-0015**

32
33 *To issue a site certificate for a proposed wind energy facility, the Council must find that*
34 *the applicant can design and construct the facility to reduce cumulative adverse*
35 *environmental effects in the vicinity by practicable measures including, but not limited*
36 *to, the following:*

37
38 *(1) Using existing roads to provide access to the facility site, or if new roads are*
39 *needed, minimizing the amount of land used for new roads and locating them to*
40 *reduce adverse environmental impacts.*

41
42 *(2) Using underground transmission lines and combining transmission routes.*
43

1 (3) Connecting the facility to existing substations, or if new substations are needed,
2 minimizing the number of new substations.

3
4 (4) Designing the facility to reduce the risk of injury to raptors or other vulnerable
5 wildlife in areas near turbines or electrical equipment.

6
7 (5) Designing the components of the facility to minimize adverse visual features.

8
9 (6) Using the minimum lighting necessary for safety and security purposes and using
10 techniques to prevent casting glare from the site, except as otherwise required by the
11 Federal Aviation Administration or the Oregon Department of Aviation.

12 13 **Findings of Fact**

14
15 The standard is limited to environmental effects that an applicant is capable of reducing and
16 does not require the Council to find that a wind energy facility will have no cumulative
17 environmental impacts.

18 19 *Access Roads*

20
21 OAR 345-024-0015(1) encourages the use of existing roads for facility site access, minimizing
22 the amount of land used for new roads, and locating new roads in such a manner that reduces
23 adverse environmental impacts. As described in Section III.A.2., *Related or Supporting Facilities*,
24 of the 62 total miles of access roads needed for the wind facility, 19 miles will be temporarily
25 improved existing access roads; this results in use of 31 percent of existing access roads for the
26 wind facility. Eighteen miles of new permanent access roads will be developed for the solar
27 facility and BESS. These roads will also be the access roads used for the northern substation and
28 O&M building for both the wind and solar facility. The roads to these other related or
29 supporting facilities will be located in a centralized area next to one another which will reduce
30 the overall impact of each of these facilities if they were located in separate locations, which
31 would require longer or more access roads. After construction, operational roads will be
32 narrowed to have a smaller overall operational footprint. These areas used for construction
33 won't be necessary for facility operation and will be decompacted as needed and revegetated
34 according to the procedures and success criteria identified in Attachment P-2: Draft
35 Revegetation and Noxious Weed Plan discussed more in Section IV.H., *Fish and Wildlife Habitat*,
36 under Fish and Wildlife Habitat Condition 1.

37
38 New roads and modifications to existing roads will have to be compliant with avoidance
39 measures that avoid direct impacts to environmental resources protected under other Council
40 standards. For instance:

- 41 • Under Threatened and Endangered Species Condition 1, there must be a 785–1320-foot
42 buffer from Category 1 Washington Ground Squirrel (WGS) habitat;

- Under Historic, Cultural, and Archeological Resources Condition 2 a 50-meter buffer would be maintained about resources that are listed or likely to be listed on the National Register of Historic Places (NRHP);
- Under Removal Fill Condition 2 the final facility layout would have to maintain at least a 50-foot buffer from any jurisdictional wetlands and waters.

Section IV.M.5., *Traffic Safety*, provided a detailed discussion of the public roads that the applicant proposed to use as primary haul and transportation routes. Under Public Services Condition 1, the applicant will be required to coordinate the final haul and transportation routes with Umatilla County and other communities that may manage roads and develop and submit to the Department executed road use agreements as part of a Traffic Management Plan. The Traffic Management Plan will be based on final design and identify, and include maps of, all public roads used for construction, road names, locations, segments used, and road conditions. The road use agreements will establish pre-construction road conditions for public roads used and will identify where upgrades will be necessary to accommodate facility traffic and deliveries. The agreements will also establish standards for road improvements and maintenance for any public roads damaged or worn during construction. For instance, one of the primary public transportation routes proposed to be used by the applicant will be County Road (CR) 1350, which is managed by Umatilla County. This road will be inventoried prior to construction to document conditions, and improved in a manner that meets County standards within the County right-of-way, and therefore will avoid impacts to sensitive resources, and will be improved or repaired after construction is completed. Using these types of existing public roads in a manner where potential impacts to sensitive environmental resources are avoided or minimized is consistent with, and encouraged under, OAR 345-024-0015(1). Therefore, the Council finds that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by using existing roads to provide access to the facility site.

It is anticipated that the use of public roads will avoid impacts, or not cause any new impacts, to sensitive resources such as habitat, cultural resources, and wetlands. Nevertheless, the applicable buffer distances and avoidance areas designated in applicable and abovementioned site certificate conditions will apply to public roads within the site boundary. Roads located on private property will also be required to adhere to avoidance measures and buffers as designated in the applicable and abovementioned conditions. However, to ensure that, to the maximum extent feasible, the applicant uses existing roads on private property to provide access to the site for construction and operation, and to ensure that new roads used for construction and operation on private property minimize the amount of land used and are located to reduce adverse environmental impacts, the Council imposes the following conditions:

Cumulative Effects Standard for Wind Energy Facilities Condition 1 (GEN): The certificate holder shall design, construct, and operate the facility to reduce cumulative adverse environmental effects in the vicinity by using existing roads to provide access to

1 the facility. And new roads must minimize the amount of land used and be located to
2 reduce adverse environmental impacts.

3 [GEN-CE-01]
4

5 **Cumulative Effects Standard for Wind Energy Facilities Condition 2 (PRE):** Prior to
6 construction, the certificate holder shall:

- 7 a. Evaluate existing roads on private property and use existing roads to the maximum
8 extent practicable for construction and operation; and
- 9 b. Provide to the Department a map set illustrating the location of new roads used for
10 construction and operation of the facility. Maps shall illustrate the locations of:
 - 11 i. New roads
 - 12 ii. Wetlands or waters of the state;
 - 13 iii. Category 1 through Category 5 habitats;
 - 14 iv. Active agricultural lands and property boundaries.

15 [PRE-CE-01]
16

17 *Collector Lines, Transmission Lines and Substations* 18

19 OAR 345-024-0015(2) and (3) encourage wind facilities to utilize underground transmission
20 lines, combine transmission routes and minimize the number of new substations. As described
21 in Section III.A.2., *Related or Supporting Facilities*, the facility includes 230 kV transmission lines
22 and 34.5 kV collector lines.
23

24 The new 6.8-mile, single circuit 230-kV Substation Connector transmission line will connect the
25 southern and northern substations. Although this will be a new transmission line, it will be
26 centrally located within the site boundary within the wind turbines and other related or
27 supporting facilities (See ASC Exhibit C, Figure C-4: Detail Map Index and Figures C-4.31 and
28 Figure C-4.35.)
29

30 The 25.3 miles of 230 kV UEC Cottonwood transmission line (UEC Cottonwood
31 Route/Alternative Route) will include approximately 8.4 miles of new single-circuit 230-kV
32 transmission line in a new transmission corridor. However, it will also include the replacement
33 of approximately 9.6 miles of an existing 12.47-kV distribution line with a 230-kV transmission
34 line and distribution underbuild, and approximately 7.3 miles of existing 115-kV UEC
35 transmission line will be upgraded to a double-circuit 230/115-kV line with 12.47-kV underbuilt
36 distribution. Therefore, approximately 16.9 miles of the proposed UEC Cottonwood Route will
37 be located within an existing transmission line corridor/right-of-way, minimizing new
38 cumulative impacts from visual intrusions and ground disturbing activities.
39

40 Three of the five miles of new 230 kV/115 kV BPA Stanfield transmission line will parallel an
41 existing 230-kV transmission line, outside of the existing transmission line's right-of-way. The
42 Council finds that this co-location of the transmission line corridors is considered combining
43 transmission routes under OAR 345-024-0015(2), therefore will be a measure to reduce
44 cumulative adverse environmental effects in the vicinity.

1
2 All of the 230 kV transmission lines will be constructed to Avian Power Line Interaction
3 Committee (APLIC) standards. APLIC-recommended measures are intended to protect raptors
4 and other large birds from accidental electrocution, and intended to protect even the largest
5 birds that may try to roost on the proposed 230-kV transmission lines. Further, as described in
6 Section III.A.2., *Related or Supporting Facilities*, the transmission line poles will be either
7 wooden or non-reflective steel monopoles which will further reduce the lines' visibility
8 compared to steel lattice construction.
9

10 For the wind energy generation components, the 34.5 kV electrical collection system will
11 include up to 89 miles of underground and up to 9.1 miles of aboveground collector lines. The
12 majority of the 34.5 kV collector lines will be buried underground, thus not contributing to a
13 cumulative visual impact of the facility; and the aboveground portions would only be used in
14 situations where a buried cable would be infeasible, such as for long "home run" stretches, and
15 at stream or canyon crossings. The aboveground collector lines will be placed on 3-foot wide by
16 100-foot tall, wooden, pole structures, spaced approximately 150 to 300 feet apart. The
17 underground portions of the collector lines will avoid cultural resources, wetlands, and
18 Category 1 habitat, similar to what is listed in the above subsection, and most collector lines will
19 be placed within or adjacent to access roads to minimize additional disturbance.³³⁷ Because the
20 majority of the 34.5 kV collector lines will be buried underground in a manner and placement
21 that will minimize ground disturbing activities and impacts to resources, and that the
22 aboveground portions of the collector lines will be minimal, the Council finds that the applicant
23 can design, construct and operate the collector lines in a manner that will reduce cumulative
24 adverse environmental effects in the vicinity of the facility.
25

26 The facility includes up to two on-site collector substations; the southern substation and the
27 northern substation, where the northern substation will be co-located with the solar facility
28 components, O&M building and primary construction laydown yard. The power generated from
29 the solar facility components will feed into the northern substation, where power generated
30 from the wind facility components in the southern area of the site boundary will feed into the
31 southern substation then will be transmitted via the new overhead 230-kV transmission line
32 discussed above to the northern substation. The applicant proposed to connect the facility to a
33 planned BPA substation or to an existing UEC substation, therefore, the Council finds that the
34 applicant will use existing substations as well as needing the facility substations. The applicant
35 explained that there are not any existing substations available along the route between the
36 northern and southern areas of the site boundary where power will be generated.³³⁸ The area
37 around both substations will be graveled, with no vegetation present, to reduce any fire risks.
38 Outdoor lighting at the substations will be kept to a minimum through the use of motion
39 sensors and switches to reduce lighting to the minimum required for safety when not in use,
40 and lighting will be directed downward and inward to prevent off-site glare. The Council finds
41 that the applicant can design, construct and operate the substations in a manner that will

³³⁷ NHWAPPDoc2-29 ASC Exhibit DD. Specific Standards_2022-01-31 Page 11 of 16.

³³⁸ Id.

1 reduce cumulative adverse environmental effects in the vicinity of the facility because they are
2 necessary for the operation of the facility, and will be constructed in a manner that will reduce
3 fire and safety risks and will minimize visual impacts.

4 5 *Wildlife Protection*

6
7 OAR 345-024-0015(4) encourages facility design that reduces the risk of injury to raptors or
8 other vulnerable wildlife in areas near wind turbines or electrical equipment. Potential impacts,
9 avoidance, and mitigation measures to wildlife are addressed in Sections IV.H., *Fish and Wildlife*
10 *Habitat* and IV.I., *Threatened and Endangered Species* of this order, and summarized below.

11
12 Under Fish and Wildlife Habitat Conditions 6 and 7, in Section IV.H., *Fish and Wildlife Habitat*,
13 the Council requires the implementation of a Wildlife Monitoring and Adaptive Management
14 Plan that applies to construction (Attachment P-4 to this order). This plan includes design
15 measures that will be established during construction that will minimize impacts to wildlife and
16 state sensitive species including raptors and other birds including, but not limited to:

- 17 • Develop and implement a worker environmental training program throughout the
18 construction of the facility;
- 19 • Constructing and operating transmission lines and collector lines according to APLIC
20 recommendations to avoid electrocution;
- 21 • Establishing driving speed limits on access roads during construction to minimize the
22 potential for vehicle collisions with wildlife or livestock, which could attract birds;
- 23 • Minimization of nesting disturbance and collision risk to state sensitive raptors through
24 implementation of a .25-mile setback of turbines from active ferruginous hawk and
25 Swainson's hawk nests;
- 26 • Minimization of collision risk and nesting disturbance to state sensitive raptors through
27 implementation of a 656-foot (200-meter) turbine setback along Alkali Canyon;
- 28 • Minimization raptor nesting disturbance through avoidance of trees with active state
29 sensitive raptor species nests;
- 30 • Minimization of wildlife collision with guy wires by installing unguyed permanent met
31 towers.

32
33 Further, during operation the applicant will employ the measures identified in the Wildlife
34 Monitoring Plan (WMP), attached to this order as Attachment P-3 and required under Fish and
35 Wildlife Habitat Condition 8. The WMP describes procedures for post-construction bird and bat
36 fatality monitoring, raptor nest monitoring, and Washington Ground Squirrel (WAGS)
37 monitoring, and describes the wildlife reporting and handling system that will be implemented
38 by operations personnel. Finally, Attachment P-2 includes a draft Revegetation and Noxious
39 Weed Plan which is required under Fish and Wildlife Conditions 1, 2 and 3 and will guide the
40 restoration of temporarily impacted areas based on their habitat type. The revegetation plan
41 also will apply to retirement activities and long term weed control. Revegetation and noxious
42 weed control measures will reduce impacts to wildlife and raptors because the measures and
43 success criteria, if met, assist the habitat to regenerate and support the wildlife that uses it.

Based on the analysis provided above and subject to compliance with the site certificate conditions under applicable Council standards; the Council finds that the applicant has demonstrated that it can reduce cumulative adverse environmental effects in the vicinity by designing the facility and implementing procedures, monitoring, and reporting to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.

Visual Features

OAR 345-024-0015(5) encourages the applicant to design a facility to minimize adverse visual features. Visual impacts from the facility are primarily related to views of the wind turbines and the 230-kV transmission lines because these would be the tallest features associated with the facility. The O&M Building, substations, solar array and BESS are not anticipated to represent significant visual impacts and are not the focus of the applicant's visual impact assessment provided for Scenic Resources and Protected Areas in ASC Exhibits R and L, respectively. Based upon the Council's review of the visual impact assessment to resources protected under these standards, and subject to site certificate conditions, the Council finds that the facility structures will not pose a significant visual impact to scenic resources under OAR 345-022-0080 or protected areas under OAR 345-022-0040. Further, as evaluated in Section IV.M.6., *Air Traffic*, the Council and the Oregon Department of Aviation evaluated the potential of the proposed wind turbines and transmission lines to object aviation traffic, where it is not anticipated to impact any local airports or flight paths. This section also provides an evaluation of the glare analysis from the solar panels that the applicant submitted, which concluded that the operation of the solar panels will not cause significant glare effects to vehicular or air traffic.

Other measures, besides facility lighting, which is discussed below, that will reduce visual impacts of the facility are described in Section III.A., *Facility*. Mandatory Condition under OAR 345-025-0006(3) (General Standard of Review Condition 3) requires that, among other items, the applicant design, construct, operate, and retire the facility substantially as described in the site certificate. The design features that will reduce visual impacts of the facility are described in this section and in sections that evaluate visual impacts from the facility. Measures the applicant will implement to reduce visual impacts of the proposed facility are:

- Wind turbines and towers will be painted in a uniform matte-finish neutral white or light gray;
- Support poles for the transmission lines will be wood or non-reflective steel (e.g., self-weathering steel) to blend with the surroundings;
- O&M Building and substations structures will be finished in a neutral color to blend with the surrounding landscape;
- Solar module crystalline cells will be housed within antireflective glass panels to reduce reflectivity and prevent glare;

- Access roads and other areas of ground disturbance will be watered during construction to avoid the generation of airborne dust.

Based on the analysis provided here, applicant described facility construction and design features, and subject to site certificate conditions under applicable Council standards, the Council finds that the applicant has demonstrated that it can design the components of the facility to minimize adverse visual features.

Lighting

OAR 345-024-0015(6) requires the use of techniques to prevent casting glare from the site and the use of minimum lighting necessary for safety and security purposes, except as otherwise required by the Federal Aviation Administration (FAA) and the Oregon Department of Aviation. Section IV.M.6., *Air Traffic*, of this order provides a lengthy discussion of the potential impacts of the facility to public and private providers of air traffic and includes an evaluation from the Oregon Department of Aviation and an evaluation of FAA requirements. As detailed in that section, the submission of a FAA Form 7460-1 may result in a FAA Determination of No Hazard to Air Navigation and may include conditional provisions, limitations to minimize potential problems, supplemental notice requirements, or requirements for marking and lighting. Public Services Condition 3 requires the submission of the FAA 7460-1 Notice to ODA and FAA, where the results are provided to the Department. Wind turbines will be marked and lighted only as necessary for safety and security purposes according to FAA standards (FAA Advisory Circular 70/7460-1L), but no other lighting will be used on the turbines. Under current FAA standards, flashing red aviation lighting will be mounted atop turbines, and all of the lights will be programmed to flash in unison, so that all of the wind facility components will be perceived as a single unit by pilots flying at night. The applicant maintained that this will use the minimum lighting required to maintain safe operations of the facility and that lighting at the O&M building and substations will be pointed downward to reduce visual intrusions from the facility.

Based on the evaluation provided here and subject to compliance with site certificate conditions under the applicable Council standard, the Council finds that the applicant has demonstrated that it can reduce cumulative adverse environmental effects in the vicinity by designing the components of the facility to minimize the adverse impacts of lighting.

Conclusions of Law

Based on the foregoing findings of fact and conclusions, and with site certificate conditions, the Council finds that the facility complies with the Council's Cumulative Effects Standards for Wind Energy Facilities.

IV.P.3. Siting Standards for Transmission Lines: OAR 345-024-0090

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

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

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

Findings of Fact

The facility includes the following transmission lines:

- 6.8-mile, single circuit 230-kV Substation Connector transmission line
- 25.3 miles of 230 kV UEC Cottonwood transmission line (UEC Cottonwood Route/Alternative Route), of which:
 - approximately 8.4 miles will be a new single-circuit 230-kV transmission line,
 - approximately 9.6 miles will replace an existing 12.47-kV distribution line with a 230-kV transmission line and distribution underbuild, and
 - approximately 7.3 miles will upgrade an existing 115-kV UEC transmission line to a double-circuit 230/115-kV line with 12.47-kV underbuilt distribution.
- 5 miles of 230 kV/115 kV BPA Stanfield transmission line, of which approximately 3 miles will parallel an existing 230-kV transmission line, outside of the existing transmission line's right-of-way
- 9.1 miles of aboveground 34.5 kV electrical collector lines for wind and 5.5 miles of 34.5 kV aboveground collector lines for solar.³³⁹

Electric Fields

The electric charge (measured as voltage) on an energized transmission line conductor produces electric fields. The greater the overall transmission line voltage, the greater the strength of the electric field. The software program used by the applicant and its consultant, Tetra Tech, to evaluate electric fields and compliance with the 9 kV per meter (kV/m) at one meter above the ground surface threshold is the Corona and Field Effects Program (Version 3.1). This program was developed by BPA and is based on the methods and equations of the Transmission Line Reference Book published by the Electric Power Research Institute (EPRI).

³³⁹ The above-ground 34/5 kV Collector Lines were not included or evaluated in ASC Exhibit AA. The 9.1 miles of 34.5 kV aboveground collector line will be located on privately owned lands and the 5.5 miles of 34.5 kV aboveground collector lines for solar facility components will be located within the fence line for the solar and battery facilities and on private property. Therefore, these collector lines will be located in an area not accessible to the public, consequently, compliance with the standard is not required.

1 The modeling assumptions included in the electric field evaluation for the proposed
2 transmission lines is provided below:³⁴⁰

3
4 UEC Cottonwood 230kV/115kV double-circuit transmission line (ASC Exhibit AA Figure AA-3):

- 5 • Width of modeling – 200 feet on each side of the center line. Sample points are taken
6 every 4 feet uniformly in a perpendicular direction to the center line. The right-of-way
7 (ROW) is estimated at 50 feet on each side of the center line;
- 8 • Horizontal location of the three conductors – 10 feet (A circuit), 13 feet (B circuit), and
9 10 feet (C circuit) on each side of the double-circuit center line;
- 10 • Height of conductors – 24.9 (C circuit), 40.9 (B circuit), and 56.9 (A circuit) feet,
11 respectively;
- 12 • Conductor diameters – 1.345 inches;
- 13 • Power – 961 amps, or 0.961 kiloamperes (kA);
- 14 • Horizontal location of the two ground wires – 6 feet and -6 feet from each side of the
15 double-circuit center line;
- 16 • Height of ground wires – 63.9 feet; and
- 17 • Ground wire diameter – 0.5 inch.

18
19 Substation Connector 230-kV single-circuit transmission line (ASC Exhibit AA Figure AA-4):

- 20 • Width of modeling – 200 feet on each side of the center line; sample points were taken
21 every 4 feet uniformly in a perpendicular direction to the center line. The ROW is
22 estimated at 50 feet on each side of the center line;
- 23 • Horizontal location of the three conductors – 10 feet (A circuit), -10 feet (B circuit) and
24 10 feet (C circuit);
- 25 • Height of conductors – 44.9 feet (A circuit), 34.9 feet (B circuit), and 24.9 feet (C circuit);
- 26 • Conductor diameters – 1.345 inches;
- 27 • Power – 961 amps, or 0.961 kA;
- 28 • Horizontal location of the single ground wire – 5 feet from on one side of the center
29 line;
- 30 • Height of the single ground wire – 54.2 feet; and
- 31 • Ground wire diameter – 0.5 inch.

32
33 230 kV/115 kV BPA Stanfield transmission line (ASC Exhibit AA Figure AA-5):

- 34 • Width of modeling – Out to 200 feet beyond the center line for both the proposed 230-
35 kV BPA Stanfield transmission line and the existing BPA 230-kV transmission line. Sample
36 points were taken every 6 feet uniformly in a perpendicular direction to the center line.
37 The ROW is estimated at 50 feet on each side of the center line;

³⁴⁰ NHWAPDoc2-26 ASC Exhibit AA. EMF_2022-01-31 Page 8 of 58.

- Other modeling assumptions were the same inputted as the Substation Connector 230-kV single-circuit transmission line listed above; and
- Inputs from the existing BPA H-frame transmission line including:
 - Horizontal location of the three conductors – -20 feet (A circuit), 0 feet (B circuit), and 20 feet (C circuit) from center line of the H-frame structure;
 - Height of conductors – 30 feet for all;
 - Conductor diameters – 1.345 inches; and
 - Power – 425 megawatts, calculated at 1,066 amps, or 1.066 kA.

The BPA Corona and Field Effects Program is the standard modeling software used to evaluate electric field for EFSC facilities.³⁴¹ The assumptions and modeling inputs (i.e., width of modeling on both sides of center line, height of conductors, power, and conductor diameter, etc.) are consistent with the transmission line description included in ASC Exhibit B. Other assumptions and inputs the applicant fed into the Corona and Field Effects Program included an elevation of 1,000 feet, a precipitation rate of one inch per hour, and a wind speed of 2 miles per hour. Based on use of an accepted modeling software and identification of inputs and assumptions, the Council finds that the methods to evaluate electric fields from the proposed transmission lines are adequate.

ASC Exhibit AA Attachment AA-1 through 3, *Results of the Bonneville Power Administration Corona and Field Effects Program* presented the results of modeled AC electric fields for the transmission lines, presented in Table 22: *Overhead Electric Field Results*. Figures 13 through 14 below illustrate the electric field modeling output for each transmission line configuration; Figure 15: *BPA Stanfield 230 kV with Existing 230 kV H-Frame Electrical Field Modelling Output*, illustrates the transmission line and the existing BPA transmission line.

Table 22: Overhead Electric Field Results

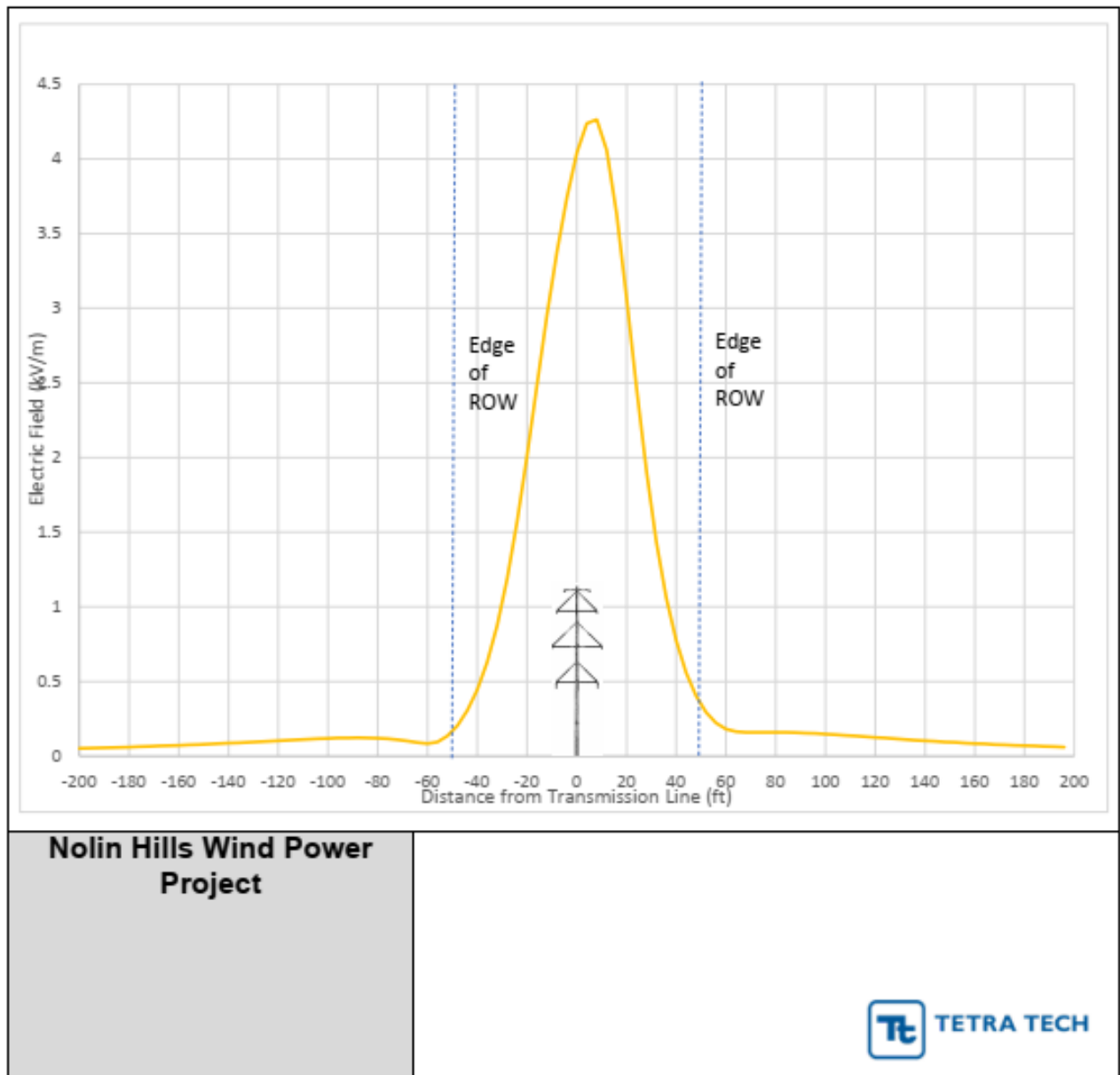
230 kV Transmission Line	Electric Field (kV/m)		
	Left Side	From Centerline	Right Side
230-kV/115-kV Double Circuit UEC Cottonwood Line	0.052	4.26	0.061
230-kV Single-Circuit Substation Connector	0.042	3.22	0.044
230-kV Single-Circuit Stanfield to BPA Substation	0.046	3.18	N/A
Below 9 kV/m limit (yes, no?) =	Yes	Yes	Yes

The UEC Cottonwood Transmission Line will have a maximum electric field of 4.26 kV/m at 1-meter, the Substation Connector Line will have a maximum of 3.22 kV/m at 1-meter, and the Stanfield to BPA Transmission Line will have a maximum electric field of 3.18 kV/m at 1-meter. Because all of these values are below the threshold of 9 kV/m at one meter above the ground surface in areas that are accessible to the public, the Council finds that the applicant has demonstrated compliance with OAR 345-024-0090(1).

³⁴¹ OSCAPPDoc1-4 Final Order on Obsidian Solar Center ASC w Attachments 2022-02-25. Page 177.

1
2

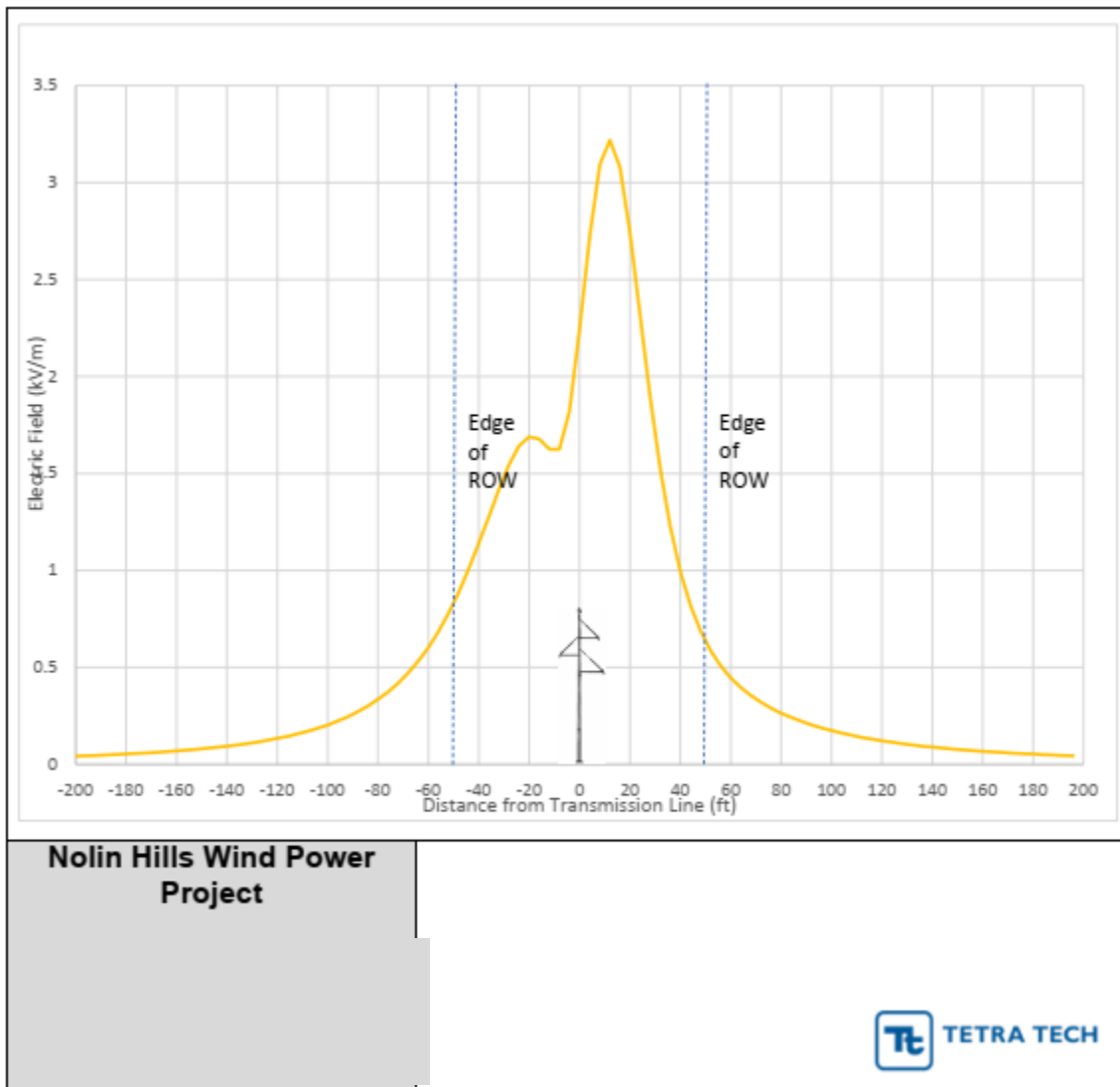
Figure 13: UEC Cottonwood 230 kV/115 kV Electrical Field Modelling Output



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Figure 14: Substation Connector 230 kV Electrical Field Modelling Output



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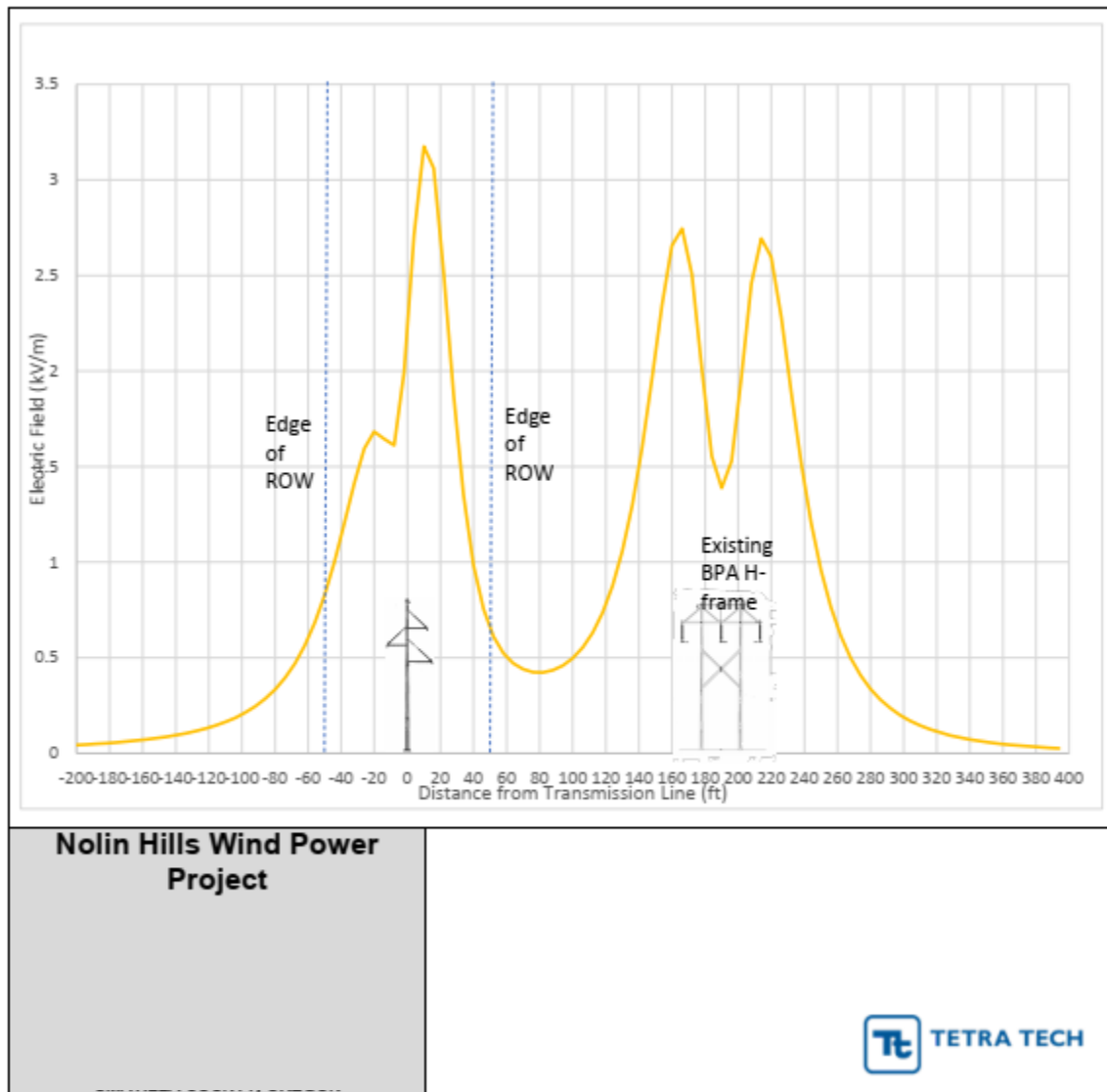
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11

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Figure 15: BPA Stanfield 230 kV with Existing 230 kV H-Frame Electrical Field Modelling Output



Induced Current

Per OAR 345-024-0090(2), the induced current from the proposed 230 kV transmission lines must be as low as reasonably achievable. This is because a conductive object in proximity to the lines, but not touching them, can become charged and when someone touches the conductive object they create a path to ground for the electric current and can receive an electric shock. The strength of the induced current in an object is positively related to the electric field strength of a nearby transmission line. More conductive materials accumulate greater charge than less conductive materials while large objects, such as a tractor trailer,

accumulate a greater charge than smaller objects such as a pick-up truck.³⁴² The National Electrical Safety Code (NESC) sets the standards for practical safeguarding of people during the installation, operation, or maintenance of electric supply and communication lines and the 2012 NESC Rule 234G.3 that addresses induced current and sets forth a certain standard to ensure the safety and health implications of the same are properly addressed:³⁴³

[f]or voltages exceeding 98 kV ac to ground, either the clearances shall be increased or the electric field, or the effects thereof, shall be reduced by other means, as required, to limit the steady-state current due to electrostatic effects to 5 mA, rms, if an ungrounded metal fence, building, sign, billboard, chimney, radio or television antenna, tank or other installation, or any ungrounded metal attachments thereto, were short-circuited to ground.

The applicant used Electric Power Research Institute (EPRI) to estimate the maximum current that could be induced in several types of vehicles and agricultural-related pieces of equipment potentially present in the transmission line right-of-way.³⁴⁴

Table 23: Predicted Maximum Induced Current Factors

Object	Object Length	Factor: I _{sc} /E (mA/kV/m)	Maximum Induced Current (mA)*
Car	L 4.6 m x W 1.78 m x H 1.37 m	0.088	0.37
Pickup Truck	L 5.2 m x W 2.0 m x H 1.7m	0.10	0.43
Large Tractor-Trailer	Total Length 15.75 m Trailer: 12.2 m x W 2.4 m x H 3.7m	0.64	2.7
Combine	L 9.15 m x W 2.3 m x H 3.5 m	0.38	1.6
I _{sc} = short-circuit current E = AC electric field m = meter * Maximum induced current calculated for strongest predicted electric field of 4.26 kV/m associated with the facility. Source: NHWAPPDoc2-26 ASC Exhibit AA. EMF_2022-01-31, Table AA-4.			

The strongest predicted electric field for the transmission line configurations is 4.26 kV/m for the 230-kV/115-kV double-circuit transmission line. Based on these calculations, vehicles and equipment listed in Table 23 would all have short-circuit currents less than the 5-mA NESC standard.

Programs and design measures to reduce or eliminate induced current include:

³⁴² NHWAPPDoc2-26 ASC Exhibit AA. EMF_2022-01-31 Page 14 of 58.

³⁴³ NESC Rule 234G.3 was not updated in the 2017 and 2020 NES Codes. NESC 2017 Updates previews_1914980_pre. file:///F:/State%20Projects/NHW%20-%20Nolin%20Hills%20Wind/02%20Application%20Review/02.03%20Draft%20Proposed%20Order/DPO%20Refere%20nce%20Docs/NESC%202017%20Updates%20previews_1914980_pre.pdf Accessed on 04-05-2022.

³⁴⁴ Electric Power Research Institute. Transmission Line Reference Book. Third Edition. 2005, Table 7.8-2.

- Constructing the substation with a grounding mat extending 4-feet from the substation fence; aboveground structures would be electrically connected to the grounding mat
- Preconstruction identification of wire fences, pipelines, irrigation lines, metal roofs, and other objects near the right-of-way in which a current could be induced. All such objects will be properly grounded within or as close as practicable to the right-of-way in order to prevent induced current and nuisance shocks.

To ensure that induced currents are minimized based on applicant's representations, consistent with Council's Site-Specific Condition under OAR 345-025-0010(4), the Council imposes the following condition:

Siting Standards for Transmission Lines Condition 1 (GEN):

- a. The certificate holder must design, construct and operate the transmission lines in accordance with the requirements of the National Electrical Safety Code as approved by the American National Standards Institute; and
- b. The certificate holder must 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.

[GEN-ST-01, Site Specific Condition OAR 345-025-0010(4)]

Conclusions of Law

Based on the findings of fact presented in this section and subject to compliance with the Siting Standards for Transmission Line Condition 1, the Council finds that the facility complies with the Council's Siting Standards for Transmission Lines.

IV.Q. Other Applicable Regulatory Requirements Under Council Jurisdiction

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

IV.Q.1. Oregon Department of Environmental Quality (DEQ) Noise Control Regulations for Industry and Commerce: OAR 340-035-0035

(1) Standards and Regulations:

(b) New Noise Sources:

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

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

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

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

26 (iii) *For noise levels generated or caused by a wind energy facility:*

27 i. *The increase in ambient statistical noise levels is based on an*
28 *assumed background L50 ambient noise level of 26 dBA or the actual*
29 *ambient background level. The person owning the wind energy*
30 *facility may conduct measurements to determine the actual ambient*
31 *L10 and L50 background level.*

32 ii. *The "actual ambient background level" is the measured noise level at*
33 *the appropriate measurement point as specified in subsection (3)(b)*
34 *of this rule using generally accepted noise engineering measurement*
35 *practices. Background noise measurements shall be obtained at the*
36 *appropriate measurement point, synchronized with windspeed*
37 *measurements of hub height conditions at the nearest wind turbine*
38 *location. "Actual ambient background level" does not include noise*
39 *generated or caused by the wind energy facility.*

40 iii. *The noise levels from a wind energy facility may increase the ambient*
41 *statistical noise levels L10 and L50 by more than 10 dBA (but not*
42 *above the limits specified in Table 8), if the person who owns the*
43 *noise sensitive property executes a legally effective easement or real*
44 *covenant that benefits the property on which the wind energy facility*

1 is located. The easement or covenant must authorize the wind energy
2 facility to increase the ambient statistical noise levels, L10 or L50 on
3 the sensitive property by more than 10 dBA at the appropriate
4 measurement point.

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
8 point are predicted assuming that all of the proposed wind facility's
9 turbines are operating between cut-in speed and the wind speed
10 corresponding to the maximum sound power level established by IEC
11 61400-11 (version 2002-12). These predictions must be compared to
12 the highest of either the assumed ambient noise level of 26 dBA or to
13 the actual ambient background L10 and L50 noise level, if measured.
14 The facility complies with the noise ambient background standard if
15 this comparison shows that the increase in noise is not more than 10
16 dBA over this entire range of wind speeds.

17 v. For purposes of determining whether an operating wind energy
18 facility complies with the ambient noise standard where a landowner
19 has not waived the standard, noise levels at the appropriate
20 measurement point are measured when the facility's nearest wind
21 turbine is operating over the entire range of wind speeds between
22 cut-in speed and the windspeed corresponding to the maximum
23 sound power level and no turbine that could contribute to the noise
24 level is disabled. The facility complies with the noise ambient
25 background standard if the increase in noise over either the assumed
26 ambient noise level of 26 dBA or to the actual ambient background
27 L10 and L50 noise level, if measured, is not more than 10 dBA over
28 this entire range of wind speeds.

29 vi. For purposes of determining whether a proposed wind energy facility
30 would satisfy the Table 8 standards, noise levels at the appropriate
31 measurement point are predicted by using the turbine's maximum
32 sound power level following procedures established by IEC 61400-11
33 (version 2002-12), and assuming that all of the proposed wind
34 facility's turbines are operating at the maximum sound power level.

35 vii. For purposes of determining whether an operating wind energy
36 facility satisfies the Table 8 standards, noise generated by the energy
37 facility is measured at the appropriate measurement point when the
38 facility's nearest wind turbine is operating at the windspeed
39 corresponding to the maximum sound power level and no turbine
40 that could contribute to the noise level is disabled.

41 ***

42 (3) Measurement:

43 (a) Sound measurements procedures shall conform to those procedures which are
44 adopted by the Commission and set forth in Sound Measurement Procedures

Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

A. 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

B. That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);...

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(g) Sounds that originate on construction sites.

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0030(1)(e);

The Oregon Department of Environmental Quality's (DEQ) Noise Control Regulations for Industry and Commerce apply to operational noise from proposed energy facilities, as industrial noise sources. In 1991, DEQ's Noise Control Program was terminated; however, the rules remain in effect. Regulated sources of noise are legally responsible for complying with the applicable provisions and standards of the regulations. As described above, because ORS 469.503(3) and the Council's General Standard of Review (OAR 345-022-0000) require Council to find that a proposed facility complies with all other applicable requirements, which includes DEQ's noise control regulations, and because DEQ no longer enforces or monitors the regulations, Council assumes the authority as the decision maker to interpret and implement the DEQ noise rules.

Findings of Fact

OAR 340-035-0035 establishes noise limits for new industrial or commercial noise sources based upon whether those sources would be developed on a previously used or previously

unused site.³⁴⁵ Land use within the site boundary includes private agriculture, generally used for dryland wheat production or rangeland. Agricultural operations are not considered industrial and commercial noise sources per OAR 340-035-0015(47). Therefore, the facility is considered a new industrial noise source and the site is considered a previously unused site and evaluated per the requirements of OAR 340-035-0035(1)(b)(B).

The analysis area for evaluating compliance with the DEQ noise regulation included the area within and extending one-mile from the proposed site boundary.

Per OAR 340-035-0035(1)(b)(B), noise generated by a new industrial or commercial source located on a previously unused site must comply with two standards: the “ambient noise degradation standard” and the “maximum allowable noise standard.” Both of these standards represent allowable noise levels at “real properties normally used for sleeping,” otherwise referred to as a “noise sensitive property.”

- Under the ambient noise degradation standard, facility-generated noise must not increase the ambient hourly L10 or L50 noise levels at any noise sensitive property by more than 10 dBA in any one hour, with ambient noise levels established based on noise measurements taken at an appropriate noise measurement location (point on the noise sensitive property line nearest to the noise source).
- Under the maximum allowable noise standard at OAR 340-035-0035(1)(b)(B)(i), new industrial or commercial noise sources may not exceed the noise levels specified in the noise rules Table 8, which are represented in Table 24: *Statistical Noise Limits for Industrial and Commercial Noise Sources* below.

Table 24: Statistical Noise Limits for Industrial and Commercial Noise Sources

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

³⁴⁵ OAR 340-035-0015(47) defines a “previously unused industrial or commercial site” as “property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property. Agricultural activities and silvicultural activities generating infrequent noise emissions shall not be considered as industrial or commercial operations for the purposes of this definition.”

OAR 340-035-0015(24) defines “industrial and commercial noise sources” as “noise generated by a combination of equipment, facilities, operations or activities employed in the production, storage, handling, sale, purchase, exchange, or maintenance of a...service.”

Table 24: Statistical Noise Limits for Industrial and Commercial Noise Sources

Statistical Descriptor ¹	Maximum Permissible Hourly Statistical Noise Levels (dBA)	
	Daytime (7:00 AM - 10:00 PM)	Nighttime (10:00 PM - 7:00 AM)
Notes: 1. The hourly L50, L10 and L1 noise levels are defined as the noise levels equaled or exceeded 50 percent, 10 percent, and 1 percent of the hour, respectively. Source: OAR 340-035-0035, Table 8		

The noise limits apply at “appropriate measurement points” on a “noise-sensitive property.” The “appropriate measurement point” is defined in the DEQ Noise Rules under OAR 340-035-0035(3)(b) as whichever of the following is farther from the noise source:

- 25 feet (7.6 meters) toward the noise source from that point on the noise-sensitive building nearest the noise source;
- That point on the noise-sensitive property line nearest the noise source; or
- Otherwise specified by applicant.

Noise Sensitive Receptors

Noise sensitive receptor (NSR) within 1-mile of the proposed site boundary were identified based on review of property owner records. Then, an NSR identification number was assigned to the UTM coordinates of the property taxlot; NSR locations were plotted on a facility layout map³⁴⁶; modeled operational noise levels at those properties were evaluated. Of the property owners within 1-mile of the proposed site boundary, 45 NSRs were identified and evaluated for operational noise impacts.

Construction

Construction noise is exempt from the noise standards pursuant to OAR 340-035-0035(5)(g) and (h).³⁴⁷ The evaluation of construction-related noise, including methodology and assumptions, is an informational requirement per OAR Chapter 345 Division 21 and can be utilized to inform the evaluation of construction-related noise impacts under the Council’s Protected Areas and Recreation standard of this order.

Facility construction-noise impacts are based on the following:

- 12 construction vehicles/equipment

³⁴⁶ NHWAPPDoc2-23 ASC Exhibit X. Noise_2022-01-31 Page 36 of 46, Figure X-2.

³⁴⁷ An evaluation of construction noise generated from auxiliary vehicle use and helicopter use at NSRs is not required.

- Noise levels per equipment, ranging from 73 to 88 dBA and usage rates of 16 to 50% obtained from or consistent with the Federal Highway Administration's (FHWA) 2006 Roadway Construction Noise Model
- Composite L_{eq} noise level³⁴⁸ estimated based on 12 pieces of equipment, applied usage rates for an 8-hr day, at 2,000 feet

Operations

OAR 340-035-0035(1)(b)(B)(i) restricts noise levels of new industrial or commercial noise sources located on a previously unused industrial or commercial site from increasing the ambient statistical noise level, L10 or L50, by more than 10 dBA in any one hour. OAR 340-035-0035(1)(b)(B)(iii) apply to noise levels generated by a "wind energy facility."³⁴⁹ The primary difference between (i) and (iii) is that (iii) allows for the noise evaluation of a "wind energy facility" to be based on an assumed 26 dBA ambient noise level and allows for an impacted landowner to waive the ambient degradation standard.

The facility includes wind and solar energy generation components and 230 kV transmission lines. The Council applied DEQ's noise rules for a wind energy facility. The applicant's evaluation of facility operational-noise impacts was based on an assumed ambient noise level of 26 dBA and the following noise levels from facility components:

- 112 wind turbines (GE 3.0 – 140), each at 108 dBA (included confidence interval of $k = 2$ dBA)³⁵⁰
- 2 substation GSU transformers (222 MVA), each at 105 dBA
- 97 solar inverter blocks at 97 dBA, including 5 solar panel inverters and distribution transformer; solar DC converter at 96 dBA; and BESS at 98 dBA (represented in ASC Exhibit X Figure X-2 as "DC BESS Inverter Block")
- 1 substation GSU transformer (300 MVA) at 103 dBA
- 230 kV transmission line, during foul weather events (1-millimeter per hour)

Based on the above-referenced noise levels, the applicant utilized two programs to analyze potential noise impacts – the DataKustic GmbH's computer-aided noise abatement program (CadnaA) v 2020 MR1 and the Corona and Field Effects Program Version 3 (Corona 3). The CadnaA is a comprehensive three-dimensional acoustic software model that conforms to the International Organization for Standardization (ISO) standard ISO 9613-2 "Attenuation of Sound during Propagation Outdoors."³⁵¹ The Corona 3 is a DOS-based computer model developed by

³⁴⁸ The Council finds that estimating noise in L_{eq} is the most appropriate metric because of the intermittent nature of construction equipment operation and allows for the prediction to be based on a compilation of varying noise levels throughout an 8-hr day.

³⁴⁹ OAR 340-035-0035(1)(b)(A).

³⁵⁰ NWHAPDoc2-23 ASC Exhibit X. Noise_2022-01-31. Pages 21-22 of 46.

³⁵¹ NWHAPDoc2-23 ASC Exhibit X. Noise_2022-01-31. Pages 19-20 of 46.

1 the BPA and produces estimates of electric and magnetic fields, and audible noise, based on
2 line voltage, load flow, physical dimensions of the line, and site elevation.³⁵²

3
4 The Council finds that the applicant's methods for evaluating operational noise impacts are
5 acceptable for the following reasons. CadnaA is an established model that has been relied upon
6 for the evaluation of noise impacts for numerous EFSC decisions on site certificates³⁵³ and
7 represents statistical-computations with sourced inputs. The Corona 3 model has been
8 developed by BPA. In this model, Corona performance is calculated using empirical equations
9 that have been developed by BPA over several years from the results of measurements on
10 numerous high-voltage lines. The validity of this approach for corona-generated audible noise
11 has been demonstrated through comparisons with measurements on other lines all over the
12 United States.³⁵⁴

13 14 *Maximum Allowable and Ambient Noise Degradation Standards*

15
16 The Computer Aided Noise Abatement (CadnaA) version 2018 MR1 was used to evaluate
17 operational noise from the proposed facility. CadnaA includes sound propagation factors
18 adopted from International Organization for Standardization's (ISO) 9613-2 "Acoustics - Sound
19 Attenuation During Propagation Outdoors" to account for geometric divergence, atmospheric
20 absorption, reflection from surfaces, screening by topography and obstacles, terrain complexity
21 and ground effects, source directivity factors, seasonal foliage effects, and meteorological
22 conditions.

23
24 Operational noise from the proposed facility is compared to the maximum allowable noise
25 limits, as summarized in Table 25 (OAR 340-035-0035, Table 8), the most restrictive of which is
26 50 dBA at night. The anti-ambient noise degradation standard requires a demonstration that
27 noise generated during facility operation must not cause the hourly L50 noise level at any NSR
28 to exceed 10 dBA above ambient statistical noise levels, or in this case, result in operational L50
29 noise levels of 36 dBA.

352 *Id.*

353 MSEFAPPD04-1 Final Order with Attachments 2021-08-02. Available:
<https://www.oregon.gov/energy/facilities-safety/facilities/Pages/MSE.aspx>. BSPAPPD02 Final Order on 2023-04-
24. Available: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/BSP.aspx>

354 Bonneville Power Administration. Klondike III/Biglow Canyon Wind Integration Project, Appendix C: Electrical
Effects, Page 1. 2006. Accessed online:
<https://legacy.bpa.gov/efw/Analysis/NEPADocuments/nepa/Klondike/AppendixC-EMF.pdf> Date Accessed: 2022-
03-09.

Table 25: Facility Operational Noise Analysis – Acoustic Modeling Results

NSR ID	Property Owner	Modeled Project Sound Level (dBA)¹	Increase Above 26 dBA Ambient (dBA)	Waiver Required?²
1001	Sylvia Aristequi	33	8	No
1002	Margaret Skillman	31	6	No
1009	Brian and Bridget Schultz	28	4	No
3	Westland Enterprises LLC	36	10	Yes
1010	Janet Grove	28	4	No
1012	Tyler & O'Neil Bowman	26	3	No
1013	Kent Beebe	26	3	No
1014	Delwyn & Sandra Hendrickson	32	7	No
1015	Brian Skillman	33	8	No
1020	Kent & Katherine Beebe	26	3	No
10	Chester Prior	34	9	No
1022	Jordan Creek Cattle Ranch LLC	29	5	No
1025	Cunningham Sheep Co.	29	5	No
15	J.R. Simplot Company	38	12	Yes
1026	Cunningham Sheep Co.	29	5	No
1027	Damon & Lori Horn	28	4	No
1028	Cunningham Sheep Co.	29	4	No
1029	Herbert & Nadine Bork	27	4	No
1030	Kathy Nelson	27	4	No
1031	Bill & Jeanne West Family Trust	26	3	No
1038	Samuel Ramos	25	2	No
1042	Lloyd & Katherine Ferge	29	4	No
1043	Lloyd & Katherine Ferge	29	5	No
1046	Patricia Widner	35	9	No
1051	Clayton Briscoe	29	5	No
1052	Phillip Marcum	29	5	No
1053	Anthony Koleszar	31	6	No
1054	Ygnacia & Sylvia Aristequi	35	10	Yes
1057	Delwyn & Sandra Hendrickson	30	6	No
1061	Kent Beebe	26	3	No
1064	Cunningham Sheep Co.	29	5	No
1066	Jason & Thyann Horn	31	6	No
47	Bert Curtis	37	11	Yes
54	Brian & Arlene Moore	36	10	Yes
59	Vincent & Lohman Vazza	34	9	No

Table 25: Facility Operational Noise Analysis – Acoustic Modeling Results

NSR ID	Property Owner	Modeled Project Sound Level (dBA) ¹	Increase Above 26 dBA Ambient (dBA)	Waiver Required? ²
61	Jack Paluso	31	6	No
71	Saul Chairez	38	12	Yes
79	Paul & J Wagner-Bellingham	36	10	Yes
89	Harry & Helen Noble	17	1	No
85	Harry & Helen Noble	38	12	Yes
<p>Notes:</p> <ol style="list-style-type: none"> 1. Modeled project sound level is the predicted noise level from facility components and does not include the L_{cum} with ambient noise level of 26 dBA. 2. OAR 340-035-0035(1)(b)(B)(iii)(IV) allows for a landowner to waive the ambient degradation standard. For NSR locations where modeled operational noise levels are predicted to exceed the ambient noise degradation standard, the applicant would be required to obtain a waiver from the landowner or demonstrate that the facility has been designed in a manner that satisfies the standard. Actual ambient monitoring data may also be used to provide a more accurate evaluation, prior to construction. 				

As presented in Table 25: *Facility Operational Noise Analysis – Acoustic Modeling Results*, the operational noise from the facility will comply with the maximum allowable L50 noise limit of 50 dBA at all NSR locations. The facility will not comply with the 10 dBA ambient noise degradation standard at NSRs 3, 15, 47, 54, 71, 79, 1054 and 85. At each of these NSR locations, the predominant noise source contributing to the exceedance is the proposed 230 kV transmission line during rainy conditions.

The Council imposes the following condition requiring that the applicant demonstrate that the facility, at final design, complies with the ambient noise degradation standard as follows:

Noise Control Condition 1 (PRE): Prior to construction, the certificate holder shall provide to the Department:

- Information that identifies the final design locations of all facility components to be built at the facility;
- The maximum sound power level for all noise generating facility components based on manufacturers' warranties or confirmed by other means acceptable to the Department;
- The results of the noise analysis of the final facility design performed in a manner consistent with the requirements of OAR 340-035-0035(1)(b)(B)(iii)(IV) and (VI). The analysis must demonstrate to the satisfaction of the Department that the total noise generated by the facility would meet the ambient noise degradation test and maximum allowable test at the appropriate measurement point for all potentially-affected noise sensitive properties within 1-mile of the site boundary, unless otherwise agreed upon by the Department based on the acoustic noise

- environment, or that the certificate holder has obtained the legally effective easement or real covenant for expected exceedances of the ambient noise degradation test described (d) below; and,
- d. For each noise-sensitive property where the certificate holder relies on a noise waiver to demonstrate compliance in accordance with OAR 340-035-0035(1)(b)(B)(iii)(III), a copy of the legally effective easement or real covenant pursuant to which the owner of the property authorizes the certificate holder's operation of the facility to increase ambient statistical noise levels L_{10} and L_{50} by more than 10 dBA at the appropriate measurement point. The legally effective easement or real covenant must: include a legal description of the burdened property (the noise sensitive property); be recorded in the real property records of the county; expressly benefit the property on which the wind energy facility is located; expressly run with the land and bind all future owners, lessees or holders of any interest in the burdened property; and not be subject to revocation without the certificate holder's written approval.

[PRE-NC-01]

Noise Control Regulations—Noise Complaints and Monitoring Program

Pursuant to the DEQ noise standards under OAR 340-035-0035(4)(a), the Council has authority to require the owner of an operating noise source to monitor and record the statistical noise levels upon written notification. In the event of a complaint regarding noise levels during facility operation, the Council has the authority to act in the place of DEQ to enforce this provision to verify that the certificate holder is operating the facility in compliance with the noise control regulations. Therefore, the Council adopts the following condition:

Noise Control Condition 2 (OPR): During operation, the certificate holder shall maintain a complaint response system to address noise complaints. The certificate holder shall notify the Department within two working days of receiving a noise complaint related to the facility. The notification should include, but is not limited to, the date the certificate holder received the complaint, 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.

[OPR-NC-01]

Conclusions of Law

Based on the foregoing findings of fact and analysis, and compliance with the conditions, the Council finds that the facility will comply with the Noise Control Regulations in OAR 340-035-0035(1)(b)(B).

1 IV.Q.2. Removal-Fill Law
2

3 The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands
4 (DSL) regulations (OAR 141-085-0500 through 141-085-0785) require a removal-fill permit if 50
5 cubic yards (cy) or more of material is removed, filled, or altered within any “waters of the
6 state”³⁵⁵ (WOS). In addition, any amount of fill or removal of material below the ordinary high
7 water level (OHWL) or within hydrologically connected wetlands for a designated essential
8 salmonid stream will require a removal fill permit. The Council, in consultation with DSL, must
9 determine whether a removal-fill permit is needed and if so, whether a removal-fill permit
10 should be issued.

11
12 The analysis area for wetlands and other waters of the state is the area within the site
13 boundary, which encompasses 48,159 acres. The applicant established a smaller area within the
14 analysis area to delineate wetlands and WOS via desktop and field surveys (study area), which
15 encompasses the proposed 15,477-acre microsite area (13,767 acres associated with the wind
16 facility, and the remaining 1,710 for the solar facility).

17
18 **Findings of Fact**
19

20 ASC Exhibit J provides the applicant’s analysis of potential impacts from construction and
21 operation of proposed wind facility components on regulated WOS as defined under ORS
22 196.800(15). ASC Exhibit J Attachment J-3 provides the applicant’s analysis of potential impacts
23 from construction and operation of solar facility components on regulated WOS as defined
24 under ORS 196.800(15).
25

26 The Council’s findings of fact, reasoning and analysis are presented below to support Council’s
27 evaluation of potential impacts to jurisdictional wetlands and WOS and of whether a removal-
28 fill permit is required for the facility.
29

30 *IV.Q.2.a Department’s Evaluation of Applicant’s Methods for Evaluating Potential Waters of the*
31 *State*
32

33 In order to identify potential wetlands and other WOS, the applicant’s consultant, Tetra Tech,
34 conducted wetland delineation studies in accordance with DSL’s technical requirements under
35 OAR 141-090-0030 and OAR 141-090-0035(1-17). The applicant’s wetland delineation studies
36 were submitted to DSL, through the EFSC siting process, and were reviewed and concurred with
37 by DSL, as referred and incorporated into this section.³⁵⁶ The Council reviewed the applicant’s
38 methods for evaluating potential wetlands and other WOS within the study area and the
39 Council finds that the methods are appropriate because they are consistent with and follow

³⁵⁵ ORS 196.800(15) defines “Waters of this state.” The term includes wetlands and certain other waterbodies.

³⁵⁶ NHWAPPDoc2-9a ASC Exhibit J. DSL Concurrence Wind Components_2021-05-04. (WD # 2019-0633)
 NHWAPPDoc2-9b ASC Exhibit J. DSL Concurrence Solar Components_2021-04-07. (WD #2020-0613)

1 DSL's technical requirements under OAR 141-090-0030 and OAR 141-090-0035(1-17) and were
2 acceptable to DSL to provide concurrence. The applicant's methods are summarized below.

3
4 The applicant conducted both desktop and field studies in 2019 and 2020, including a review of
5 the National Wetlands Inventory (NWI) and the National Hydrography Dataset, hydraulic soils
6 data, aerial photographs to identify potential wetlands and other waters. Field investigations
7 for the delineation of wetlands and other waters included pedestrian surveys within established
8 sample plots of the features identified through the literature review throughout the 15,477
9 acre study area. While the applicant's literature review included areas where the transmission
10 line corridors would be located, certain areas were not accessible for field surveys (see ASC
11 Exhibit J Figure J-3). These unsurveyed transmission line corridors are addressed below.

12
13 The applicant's consultant conducted field delineation surveys based on review of guidance
14 documents including: the U.S. Army Corps of Engineer's 2008 Regional Supplement to the Corps
15 of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0); USACE's 1987 Corps
16 of Engineers Wetlands Delineation Manual, Technical Report, Y-87; EPA's 2015 Streamflow
17 Duration Assessment Method for the Pacific Northwest; U.S. Fish and Wildlife Service's 1979
18 Classification of Wetlands and Deepwater Habitats of the United States; and OAR Chapter 141,
19 Division 90.³⁵⁷

20
21 Field delineation surveys were conducted on:

- 22 • July 17-22, 2017
- 23 • September 19-22, 2017
- 24 • April 23-27, 2018
- 25 • July 17-21, 2018
- 26 • July 8-12, 2019
- 27 • May 4-5, 2020
- 28 • June 23, August 21, 2020

29
30 Based on the above-described methods, the applicant identified 78 waterways, 21 wetlands,
31 and 2 ponds within the study area. Of these, twenty-seven were identified by the applicant as
32 potentially jurisdictional. Concurrence on the identification, delineation and jurisdictional
33 designation of these wetlands and WOS was received from DSL on April 7 and May 4, 2021,
34 which are further described below.

35 36 *IV.Q.2.b Jurisdictional Wetlands and Waters of the State within the Study Area*

37
38 As presented in Table 26: *Summary of DSL-Concurred Jurisdictional Wetlands and WOS Within*
39 *the Micrositing Area* below, a total of twenty-seven jurisdictional wetlands and WOS were
40 identified and delineated by the applicant within the wind facility micrositing area and no
41 jurisdictional wetlands or WOS within the solar micrositing area. As presented in Table 26 and

³⁵⁷ NHWAPDoc2-9 ASC Exhibit J. Wetlands_2022-01-31. Page 10 of 518.

- 1 ASC Exhibit J, the applicant represented that facility construction will avoid impacts to
2 jurisdictional waters and WOS.³⁵⁸
3

Table 26: Summary of DSL-Concurred Jurisdictional Wetlands and WOS Within the Micrositing Area

Wetland/ Stream ID	Area (Acres)	ASC Exhibit J Figure Reference	Nearest Facility Component	Applicant's Proposed Avoidance Method¹
<i>Ponds</i>				
POND-1	0.04	J-2.7	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
POND-2	0.04	J-2.7	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
<i>Wetlands</i>				
WET-A	0.06	J-2.7	Transmission Line	Support structures will not be sited within this wetland or required buffer.
WET-B	0.01	J-2.7	Transmission Line	Support structures will not be sited within this wetland or required buffer.
WET-C	0.38	J-2.7	County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-D	1.01	J-2.9	Crane Path	Path is sited outside of the buffer zone for this wetland.
WET-E	0.22	J-2.6	Crane Path, Underground Collector Line	Path and collector lines are sited outside of wetland buffer.
WET-F	0.19	J-2.6	Crane Path, Underground Collector Line	Path and collector lines are sited outside of wetland buffer.
WET-G	0.13	J-2.6	Crane Path, Underground Collector Line	Path and collector lines are sited outside of wetland buffer.
WET-H	0.05	J-2.6	Crane Path, Underground Collector Line	Path and collector lines are sited outside of wetland buffer.
WET-I	0.02	J-2.3	County Road 1361	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-J	0.55	J-2.5	Transmission Line	Conductor will span canyon where this wetland is located.

³⁵⁸ NHWAPDoc2-9 ASC Exhibit J Wetlands_2022-01-31. Page 15 of 518. Applicant represents that impacts would be avoided "to the extent practicable." This representation is omitted because Council cannot make findings based on an assumption of avoidance while allowing an applicant to potentially impact jurisdictional waters if avoidance is not practicable – if avoidance is not practicable, applicant will be required to evaluate whether a removal-fill permit is necessary and may need to submit an amendment determination request to the Department to ensure impacts not presented in the ASC will not necessitate review and approval of a site certificate amendment.

Table 26: Summary of DSL-Concurred Jurisdictional Wetlands and WOS Within the Micrositing Area

Wetland/ Stream ID	Area (Acres)	ASC Exhibit J Figure Reference	Nearest Facility Component	Applicant's Proposed Avoidance Method¹
WET-K	0.12	J-2.8	Underground Collector Line	Collector lines are sited more than half a mile away.
WET-L	0.04	J-2.7	Crane Path, Underground Collector Line	Collector lines are sited more than half a mile away.
WET-M	0.66	J-2.5	County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-N	0.01	J-2.7	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-O	0.10	J-2.5	County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-P	0.20	J-2.5	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-Q	0.02	J-2.4	Transmission Line	Conductor will not be sited near this wetland.
WET-R	0.46	J-2.5	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-S	0.16	J-2.5	Farm Road off of County Road 1363	No changes will be made to the roadway that would intersect the wetland or buffer.
WET-T	0.09	J-2.8	Crane Path	Path is sited outside of the buffer zone for this wetland.
WET-Z	0.53	J-2.9	Crane Path	Path is sited outside of the buffer zone for this wetland.
Waterways				
INT-001	--	J-2.1	Transmission Line	Conductor will span over irrigation ditch.
INT-002	--	J-2.5	Transmission Line	Support structures will not be sited within the stream channel or required buffer
INT-003	--	J-2.7	Transmission Line	Support structures will not be sited within the stream channel or required buffer.
Umatilla River ²	--	J-2.2	Transmission Line	Conductor will span over the river.
Notes: <ol style="list-style-type: none"> 1. Applicant confirmed that "required buffer" refers to a 50-foot buffer from the edge of the delineated wetland or WOS. 2. Umatilla River is an essential salmonid stream and therefore any amount of fill or removal below the ordinary high water level (OHWL) or within hydrologically connected wetlands will require a removal fill permit. 				

1

2 In ASC Exhibit J, the applicant identified that wetland delineation surveys have not yet been
3 conducted in certain areas along the proposed 230 kV transmission line corridors because
4 landowner permission for survey access was not obtained. The Council estimates that the

1 extent of unsurveyed area is approximately 549 acres.³⁵⁹ Based on review of ASC Exhibit J Figure
2 J-1 and Figures J-3.1 through J-3.4, J-3.6 and J-3.7 and the online NWI, there are likely
3 jurisdictional wetlands and WOS within these unsurveyed areas, which the applicant commits
4 to avoiding.^{360, 361}

5
6 The applicant has not requested a removal-fill permit. If a removal-fill permit is needed for
7 facility construction, the applicant will be required to seek approval of a site certificate
8 amendment from EFSC for inclusion of removal-fill permit requirements, as established by DSL.
9 Because the applicant did not field-delineate all potentially jurisdictional wetlands and WOS
10 within the proposed transmission line corridors, the Council imposes the following condition to
11 ensure that preconstruction field delineation surveys are conducted to support impact
12 avoidance; and that if, once delineated, there are potential removal-fill impacts of 50 cubic
13 yards (cy) or greater, that the applicant be required to submit a request for site certificate
14 amendment for Council approval of a removal-fill permit.

15
16 **Removal Fill Permit Condition 1 (PRE):** Prior to construction of the 230 kV transmission
17 line, the certificate holder shall:

- 18 a. Conduct field delineation surveys within unsurveyed transmission line corridor areas
19 to identify any potentially jurisdictional wetlands or waters of the state.
20 b. If, based on the field delineation surveys conducted per (a), construction activities
21 would result in 50 cy or more of removal-fill, submit the field delineation report to
22 DSL and the Department, requesting DSL concurrence and confirmation of removal-
23 fill permit applicability. If DSL concurrence is received on the identified
24 wetlands/waters of the state, seek approval from EFSC to include removal fill permit
25 requirements in a request for site certificate amendment; or
26 c. If a removal-fill permit is not required for disturbance impacts within the
27 transmission line corridors, comply with Removal-Fill Condition 2(a) and (b).

28 [PRE-RF-01]
29

30 *IV.Q.2.c Avoidance and Minimization Measures*

31
32 In ASC Exhibit J, the applicant stated that facility construction and operation will not adversely
33 impact jurisdictional wetlands and WOS, as presented in Table 26 above, and that a removal-fill
34 permit will not be needed. The applicant represented that it will implement avoidance and
35 minimization measures including: worker training on avoidance of jurisdictional wetlands/WOS,

³⁵⁹ NHWAPDoc2-18 ASC Exhibit S Cultural 2022-01-31. Pages 10-11 of 80.

³⁶⁰ Applicant represents that impacts would be avoided “to the extent practicable.” This representation is omitted because Council cannot make findings based on an assumption of avoidance while allowing an applicant to potentially impact jurisdictional waters if avoidance is not practicable – if avoidance is not practicable, applicant will be required to evaluate whether a removal-fill permit is necessary and may need to submit an amendment determination request to the Department to ensure impacts not presented in the ASC will not necessitate review and approval of a site certificate amendment.

³⁶¹ National Wetlands Inventory (<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>) accessed by the Department on March 10, 2022.

1 exclusion flagging/signage, 1200-C permit requirements, spanning the Umatilla River; and,
2 facility design to avoid removal-fill impacts.

3
4 A removal-fill permit will not be needed for facility construction or operation. To ensure that
5 removal-fill impacts are either avoided or, if not avoided, and that the applicant track impacts
6 in a manner that ensures a removal-fill permit is obtained prior to the 50 cy threshold or any
7 impacts below the OHWL within the Umatilla River, the Council imposes the following
8 conditions:
9

10 **Removal Fill Permit Condition 2 (PRE):** Prior to construction of facility components
11 within the wind micrositing area, the certificate holder shall:

- 12 a. Provide the Department maps and GIS data showing the final design/layout and
13 location of jurisdictional wetlands and waters of the state (WOS) as presented in
14 Table 26 of the Final Order on the ASC and as a result of Removal-Fill Condition 1, if
15 applicable; and, in tabular format, the distance from each facility component to the
16 nearest jurisdictional wetland or WOS, demonstrating that facility components are
17 at least 50 feet or more from any of the jurisdictional wetlands and waters of the
18 state referred to in (a).
- 19 b. If final design of facility components cannot adhere to the 50-foot buffer under (a)
20 above, provide evidence to the Department that a removal-fill permit has been
21 obtained by a third-party or through a site certificate amendment; or that a removal
22 fill permit is not required.
- 23 c. Provide the Department a copy of the Worker Environmental Awareness Training,
24 developed for construction workers, to inform and educate on the location of
25 jurisdictional wetlands and WOS and of the purpose and specific location of
26 exclusion flagging and signage.

27 [PRE-RF-02]
28

29 **Removal Fill Permit Condition 3 (CON):** During construction of facility components
30 within the wind micrositing area the certificate holder shall:

- 31 a. Require contractors to complete the Worker Environmental Awareness training
32 described in Removal Fill Permit Condition 2(c). Maintain training records onsite for
33 Department review upon request.
- 34 b. Maintain maps onsite and ensure contractors have awareness of the location of
35 jurisdictional wetlands and WOS during construction activities.
- 36 c. Install flagging or signage around jurisdictional wetlands and WOS around the
37 delineated boundary including a 50-foot buffer, when any construction activities are
38 planned to occur within 150 feet.
- 39 d. Monitor flagging and signage and repair or replace flagging and signage, as needed,
40 following weather events or construction impacts.
- 41 e. If construction impacts encroach upon the 50-foot buffer under (c), provide
42 evidence to the Department that a removal-fill permit has been obtained by a third-
43 party or through a site certificate amendment; or that a removal fill permit is not
44 required.

1 [CON-RF-01]
2

3 **Removal Fill Permit Condition 4 (OPR):** During operation and maintenance (O&M) of
4 facility components within the wind micrositing area the certificate holder shall:

- 5 a. Require employees and contractors to complete the Worker Environmental
6 Awareness training described in Removal Fill Permit Condition 2(c). Maintain training
7 records onsite for Department review upon request.
8 b. Maintain maps onsite and ensure employees and contractors have awareness of the
9 location of jurisdictional wetlands and WOS during construction activities.
10 c. Install flagging or signage around jurisdictional wetlands and WOS around the
11 delineated boundary including a 50-foot buffer, when any O&M activities are
12 planned to occur within 150 feet.
13 d. Monitor flagging and signage and repair or replace flagging and signage, as needed,
14 following weather events or O&M impacts.
15 e. If O&M impacts encroach upon the 50-foot buffer under Removal Fill Permit
16 Condition 3(c), provide evidence to the Department that a removal-fill permit has
17 been obtained by a third-party or through a site certificate amendment; or that a
18 removal fill permit is not required.

19 [OPR-RF-01]
20

21 **Removal Fill Permit Condition 5 (PRE):** Prior to construction of the 230 kV BPA Stanfield
22 transmission line, if selected, the certificate holder shall identify the construction
23 method to be used to cross the Umatilla River.

24 [PRE-RF-03]
25

26 **Removal Fill Permit Condition 6 (CON):** During construction of the 230 kV BPA Stanfield
27 transmission line, if selected, the certificate holder shall verify that removal-fill impacts
28 do not occur below the OHWL unless a removal-fill permit is obtained from DSL through
29 a third-party or a site certificate amendment.

30 [CON-RF-02]
31

32 **Conclusions of Law**

33 Based on the foregoing findings of fact and conclusions, and subject to compliance with the site
34 certificate conditions, the Council finds that a removal-fill permit will not be needed for facility
35 construction or operation.

36 **IV.Q.3. Water Rights** 37 38

39 Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources
40 Department (OWRD) administers water rights for appropriation and use of the water resources
41 of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the facility
42 would comply with the statutes and administrative rules identified in the Amended Project
43 Order. The Amended Project Order identifies OAR 690, Divisions 310 and 380 (Water Resources

Department permitting requirements) as the administrative rules governing use of water resources and water rights as applicable to the facility. OAR 345-021-0010(1)(o)(F) requires that if a facility needs a groundwater permit, surface water permit, or water right transfer, that a decision on authorizing such a permit, rests with the Council.

Findings of Fact

OAR 690 establishes the procedures and standards which shall be applied by the OWRD in the evaluation of applications for a permit to appropriate surface water, ground water, to construct a reservoir and store water, to use reserved water, or to use water stored in a reservoir. The applicant has not requested, nor represented as a third-party permit, the need for a groundwater permit, a surface water permit, or a water rights transfer during the construction and operation of the facility. Therefore, the Council's findings of fact, reasoning and analysis to support Council's conclusions that, because the applicant has estimated maximum water use during facility construction and operation, and demonstrated that with conditions, it has an ability to obtain an adequate supply of water, that neither the applicant nor a third-party contractor will require a groundwater permit, surface water permit, or water right transfer for construction or operation of the facility.

Water Use and Source During Facility Construction

As presented in Table 27: *Construction Period and Daily Worst-Case Construction-Related Water Use*, facility construction will use approximately 100 million gallons (Mgal) of water per year primarily for dust suppression, concrete mixing for foundations, road construction and site preparation. The applicant estimated that based on an 18-month construction duration, average monthly water demand will be approximately 3.9 Mgal.³⁶² Based upon the applicant's estimated monthly water usage of 3.9 Mgal, this calculates out to an average of 130,000 gallons of water per day. The 18-month construction period is estimated to total 432 days of water demand for facility construction.³⁶³ As part of the Department's own calculations of applicant's data for daily water usage under worst case conditions, the following table estimates the worst-case daily demand over this 432-day period by proposed activity and water usage. Based on these assumptions, the Department estimated that the worst-case daily water demand and usage, during the 18-month construction period would range between 158,400-232,081 gallons per day. The estimated water usage for foundations associated with the facility components will be approximately 2.2 Mgal over the 18-month construction period or about 5,000 gallons per day. The largest variable that impacts water consumption for a worst-case water usage is scenario is increased water used for dust suppression during dry summer months. Under this scenario, water usage for all construction tasks could reach over 100 Mgal for the 18-month construction period or approximately 232,000 gallons per day.

³⁶² NHWAPPDoc2-14 ASC Exhibit O. Water Req_2022-01-31 Pages 7-9 of 17.

³⁶³ Applicant assumes that over the 18-month wind and solar facility construction period workers would average 24 working days per month. NHWAPPDoc2-20 ASC Exhibit U. Public Services_2022-01-31 Page 12-24 of 231, Section 3.2.2.6.

Table 27: Construction Period and Daily Worst-Case Construction-Related Water Use

Project Component/Task	Water Usage (gallons)	
	18-Month Construction Period	Daily
<i>Concrete Foundations</i>		
Wind Turbines	2,016,000	4,667
Meteorological towers	2,500	6
Substation	24,000	56
O&M building	10,000	23
Battery energy storage system	65,000	150
Solar racking posts	77,000	178
Solar Inverter/transformer pads	5,120	12
Subtotal =	2,199,620	5,091
<i>Compaction and Dust Control</i>		
Road construction	10,560,000	24,444
Dust control	58-87,500,000	134-202,546
Subtotal =	98,060,000	226,990
Total =	100,259,620	232,081
Source: NHWAPPDoc2-14, ASC Exhibit O, Table O-1 and O-2. 2022-01-31.		

ASC Exhibit O Attachment O-1 included letters from 2020 from the cities of Pendleton, Hermiston and Echo Water Departments. The City of Hermiston confirmed that it can provide up to 125,000 gallons per day up to 68 million gallons for facility construction. The City of Echo also provided a letter stating they could provide up to 125,000 gallons per day (with no limit stated) for the construction of the facility. In a March 2022 memo responding to a Department inquiry, the City of Echo confirmed its ability to supply water for the construction of the facility under existing water rights, stating that; "...Echo's current water supply wells could meet the average and worst-case water use scenarios proposed by the Nolin Hills project during a typical peak summer month period."³⁶⁴ The City of Pendleton's 2020 letter included in ASC Exhibit O confirmed the ability to provide 134,000 gallons per day up to 71,000,000 gallons for construction. The City of Pendleton also affirmed its ability to supply water for the construction of the facility under existing water rights in a response received by the Department in February 2022.³⁶⁵

Water Use and Source During Facility Operation and Maintenance

The applicant identified water use during operations to be limited to the annual washing of solar panels and the on-going water usage for the O&M building. The O&M building will be served by a groundwater well, limited to 5,000 gallons per day, which is the daily limit for an

³⁶⁴ NHWAPPDoc5-3 ASC Reviewing Agency Comment_City of Echo_Water_Slaght 2022-03-21.

³⁶⁵ NHWAPPDoc5 ASC Reviewing Agency Comment_City of Pendleton_Water_Tarter 2022-02-02.

1 exemption under ORS 537.545(1)(f).³⁶⁶ Per the applicant's estimates, during operations, the
2 facility will use approximately 1.12 million gallons of water per year for solar panel washing³⁶⁷
3 with this water to be purchased from City of Hermiston, City of Pendleton, or the City of
4 Echo.³⁶⁸

5
6 Under ORS 537.545(5) through (7), the landowner, where an exempt well is constructed, must
7 file a record of the well, with appropriate fee, with the OWRD.³⁶⁹ The provisions of ORS 537.765
8 outline water log requirements and apply to any person who constructs, alters, abandons or
9 converts a well, which will apply to bonded contractors installing the wells, and not the
10 applicant. Because the applicant proposed to use water from the on-site well during operation
11 of the facility, to ensure compliance with statutory limitations under ORS Chapters 537, the
12 Council imposes the following conditions:

13
14 **Water Rights Condition 1 (PRE):** Prior to construction of the facility, facility component
15 or phase, as applicable, the certificate holder shall identify all water-related needs and
16 estimate daily and annual water demand for each construction phase. Provide excerpts
17 of agreements or other similar conveyance to the Department demonstrating that
18 construction activities will be adequately and legally served by service providers or
19 third-party permits.

20 [PRE-WR-01]

21
22 **Water Rights Condition 2 (CON):** During construction of the facility, facility component
23 or phase, as applicable, if a water right, limited water use license or water rights transfer
24 is needed and would not be obtained by a third-party, submit and obtain approval of
25 the applicable water permit through the site certificate amendment process.

26 [CON-WR-01]

27
28 **Water Rights Condition 3 (PRO):** Prior to operation, the certificate holder shall:

- 29 a. Identify all water-related needs and estimate daily and annual water demand. If a
30 water right, limited water use license or water rights transfer is needed and would
31 not be obtained by a third-party, submit and obtain approval of the applicable water
32 permit through the site certificate amendment process.
- 33 b. Install the groundwater well in accordance with the recording requirements under
34 OAR 690-190-0100. If the certificate holder is not the landowner, the certificate
35 holder shall facilitate the landowner submission of required materials to Oregon
36 Water Resources Department. The certificate holder shall submit to the Department
37 a copy of the file submitted to Oregon Water Resources Department. This could also
38 occur within 30 days after exempt well completion under ORS 537.545, whichever
39 occurs first.

³⁶⁶ Exempt industrial water uses include drinking, flushing toilets, using sinks, and other general industrial uses.

³⁶⁷ NHWAPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 7-9 of 17.

³⁶⁸ NHWAPDoc2-14 ASC Exhibit O. Water Req_2022-01-31. Pages 13-17 of 17, Attachment O-1

³⁶⁹ See OAR 690-190-0005 for exempt groundwater use recording requirements in rule.

1 [PRO-WR-01]
2

3 **Water Rights Condition 4 (OPR):** During operation, the onsite well must not exceed
4 5,000 gallons of water use per day for the facility unless a water right or limited water
5 use license is obtained via third-party or site certificate amendment.

6 [OPR-WR-01]
7

8 **Conclusions of Law**

9 Based on the findings of fact and conditions of compliance with other applicable rules, the
10 Council concludes that the facility does not need a groundwater permit, surface water permit,
11 or water right transfer.
12


1 **V. FINAL CONCLUSIONS AND ORDER OF THE COUNCIL**

2
3 The applicant submitted an ASC requesting authorization to construct and operate a wind and
4 solar photovoltaic energy generation facility and related or supporting facilities within Umatilla
5 County. Subject to compliance with the site certificate conditions, the Council finds that a
6 preponderance of evidence on the record supports the following conclusions:
7

- 8 1. The Nolin Hills Wind Power Project complies with the requirements of the Oregon
9 Energy Facility Siting Statutes, ORS 469.300 to 469.520.
10
11 2. The Nolin Hills Wind Power Project complies with the standards adopted by the
12 Council pursuant to ORS 469.501.
13
14 3. The Nolin Hills Wind Power Project complies with all other Oregon statutes and
15 administrative rules identified in the Amended Project Order as applicable to the
16 issuance of a site certificate for the facility.
17

18 Based on the findings of fact, reasoning, conditions and conclusions of law in this Final Order,
19 the Council concludes that the applicant has satisfied the requirements for issuance of a site
20 certificate for the Nolin Hills Wind Power Project. Therefore, the Council grants issuance of a
21 site certificate subject to the terms and conditions set forth above to Nolin Hills Wind, LLC for
22 the Nolin Hills Wind Project. Pursuant to ORS 469.401, the Chairperson has executed the site
23 certificate authorizing the applicant to construct, operate and retire the facility subject to the
24 conditions set forth in the site certificate.
25

Approved on the 19th of July 2023; executed on August 30, 2023.

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By: 
Marcia L. Grail (Aug 30, 2023 14:13 PDT)

Marcia L. Grail, Chair
Oregon Energy Facility Siting Council

Attachments:

- Attachment 1: Contested Case Order (Adopted July 19, 2023)
- Attachment A: Site Certificate
- Attachment B: Reviewing Agency Comments on pASC and ASC
- Attachment C: Draft Proposed Order Comments/Index
- Attachment D: References Cited in Final Order
- Attachment E: Draft Geotechnical Investigation Protocol (framework)
- Attachment F: Performance Guarantee Agreement Form
- Attachment G-1: Draft Spill Prevention, Control, and Countermeasures Plan
- Attachment K-1: Draft Agricultural Mitigation Plan
- Attachment P-1: Draft Habitat Mitigation Plan
- Attachment P-2: Draft Revegetation and Noxious Weed Plan
- Attachment P-3: Draft Wildlife Monitoring Plan
- Attachment P-4: Wildlife Monitoring and Adaptive Management Plan (Construction)
- Attachment S-1: Draft Cultural Resources Monitoring and Inadvertent Discovery Plan
- Attachment S-2: Historical Resources Mitigation Plan
- Attachment S-3: Draft Subsurface Probing Plan
- Attachment U-1: Draft Traffic Management Plan
- Attachment U-2: Draft Fire Prevention, Suppression and Emergency Management Plan

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Per ORS 469.403(1) and (3), the date of service is the date a copy of this Order was delivered or mailed - August 31, 2023 - not the date you received it.

Per ORS 469.403(2), any party to the contested case proceeding may appeal the Council's decision on the site certificate application set forth in this Order. Per ORS 469.403(3), jurisdiction for judicial review of the Council's approval or rejection of an application for a site certificate or amended site certificate is conferred upon the Oregon Supreme Court. Proceedings for review shall be instituted by filing a petition in the Oregon Supreme Court. It is not required to apply to Council for a rehearing before appealing to the Oregon Supreme Court. A petition for review by the Oregon Supreme Court shall be filed within 60 days after the date of service of the Council's final order, listed above, or within 30 days after the date any application for rehearing is denied or deemed denied. Issues on appeal shall be limited to those raised by the parties to the contested case proceeding before the Council. If you do not file a petition for judicial review within the aforementioned time period, you lose your right to appeal.