

BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON

|
In the Matter of Request for Amendment 11 to the
Port Westward Generating Project Site Certificate

)
) ~~DRAFT~~ PROPOSED ORDER ON
) REQUEST FOR AMENDMENT 11 TO
) THE SITE CERTIFICATE

|
~~August 29, 2019~~ Oct. 3, 2019

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1 **I. INTRODUCTION**

2 The Oregon Department of Energy (Department) issues this ~~draft p~~Proposed ~~order~~Order, in
3 accordance with ORS 469.405(1) and OAR 345-027-~~0365~~0371, based on its review of *Request*
4 *for Amendment 11* to the site certificate for the Port Westward Generating Project (Request),
5 as well as comments and recommendations received by specific state agencies and local
6 governments. The certificate holder is Portland General Electric Company (certificate holder).
7 This proposed order considers oral comments made at the public hearing, written comments
8 received before the close of the record of the public hearing, agency consultation, and Council
9 comments.

10
11 Certificate holder requests that the Energy Facility Siting Council (Council) approve changes to
12 the site certificate to allow construction and operation of a proposed 4 to 6 megawatt battery
13 energy storage system (BESS) as a related or supporting facility within the existing site
14 boundary of the Port Westward Generating Project (Facility).

15
16 Certificate holder also proposes several primarily administrative amendments to the site
17 certificate that are not specific to the BESS. These requested amendments are further described
18 in Section II.A. Requested Amendment~~II.A. Requested Amendment~~.

19
20 Based upon review of this request, in conjunction with comments and recommendations
21 received by state agencies and local government entities, the Department recommends that
22 the Council approve and grant an amendment to the site certificate for the facility subject to
23 the existing, new, and recommended amended conditions set forth in this ~~draft p~~Proposed
24 ~~e~~Order.

25
26 **I.A. Name and Address of Certificate Holder**

27 Portland General Electric Company
28 121 SW Salmon Street, 3WTC0403
29 Portland, OR 97204

30
31 ***Certificate Holder Contact***

32 Arya Behbehani
33 Senior Director Environmental & Licensing Services
34 Portland General Electric Company
35 121 SW Salmon Street, 3WTC0403
36 Portland, OR 97204
37 (503) 464-8141
38 Arya.Behbehani@pgn.com

39
40 **I.B. Description of the Approved Facility**

41 The Port Westward Generating Project (facility) is a 650-megawatt natural gas-fired electric
42 generating plant consisting of two units.

1 Unit 1 is a 411 MW base-load power plant consisting of a Mitsubishi G Class combustion turbine
2 generator, one heat recovery steam generator, and one steam turbine. Unit 1 began
3 commercial operation in June 2007.

4
5 Unit 2 is a 220 MW non-base-load power plant consisting of 12 Wärtsilä 50SG reciprocating
6 internal combustion engines. Unit 2 went into commercial operation in December 2014.

7
8 **I.C. Description of Approved Facility Site Location**

9 The facility is located within the Port Westward Industrial Park in Columbia County, Oregon,
10 approximately seven miles by road northeast of the city of Clatskanie. Bradbury Slough of the
11 Columbia River lies to the northeast of the facility. Access to the facility is about 1.5 miles north
12 on Kallunki Road from its intersection with Alston-Mayger Road.

13
14 The facility is located on an approximately 852-acre parcel leased to the certificate holder by
15 the Port of St. Helens located in Section 15, Township 8 North, Range 4 West, Willamette
16 Meridian. The site boundary occupies approximately 26 acres of the larger parcel.

17
18 The proposed BESS would be located on approximately 0.2 acres adjacent to the exiting
19 switchyard within the approved site boundary. A previously approved temporary disturbance
20 area for spoils disposal is located on the parcel, approximately 0.6 miles southwest of the
21 facility. The spoils area is anticipated to be used during construction of the BESS.

22
23 **I.D. Procedural History**

24 On November 8, 2002, the Council issued its *Final Order on the Application for Site Certificate*
25 *for Port Westward Generating Project* (Final Order on the Application), authorizing the
26 certificate holder to build up to 650 megawatts of generating capacity at the site. Council has
27 approved ten amendments to the site certificate.

28
29 On December 5, 2003, the Council issued its *Final Order in the Matter of the Site Certificate for*
30 *the Port Westward Generating Project Request for Amendment No. One* (Final Order on Request
31 for Amendment 1), approving the addition and reconfiguration of several facility components,
32 and authorizing the certificate holder to develop only one of the two proposed generating
33 units, or to develop both units of the energy facility in two distinct phases.

34
35 On September 24, 2004, the Council issued its *Final Order in the Matter of the Site Certificate*
36 *for the Port Westward Generating Project Request for Amendment No. Two* (Final Order on
37 Request for Amendment 2), approving extension of the deadlines for beginning and completing
38 construction of the facility, inclusion of an alternative site layout excluding an existing roadway
39 from the facility site as an option in the site certificate, and imposing new conditions relating to
40 the Council's Fish and Wildlife Habitat Standard to ensure that the facility met the new
41 requirements in Columbia County's Zoning Ordinance relating to the Riparian Corridors,
42 Wetlands, Water Quality, and Fish and Wildlife Habitat Overlay Zone.

43

1 On January 28, 2005, the Council issued its *Final Order in the Matter of the Site Certificate for*
2 *the Port Westward Generating Project Request for Amendment No. Three* (Final Order on
3 Request for Amendment 3), approving modifications including changes to the electrical
4 transmission line alignment; addition of construction staging and laydown areas near the
5 energy facility site; addition of the spoils disposal site; addition of an auxiliary boiler within the
6 energy facility site; inclusion of the proposed switchyard as part of Phase 1 rather than Phase 2;
7 addition of new buildings for electrical controls and chlorination at the existing PGE intake
8 structure on Bradbury slough, reduction in required retirement funds; and imposing new
9 conditions and modification of other conditions regarding habitat protection for osprey,
10 peregrine falcons, and bald eagles.

11
12 On May 19, 2006, the Council issued its *Final Order in the Matter of the Fourth Request to*
13 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
14 Amendment 4), approving temporary use of 6.08 acres of land adjacent to the site boundary for
15 construction laydown and staging.

16
17 On September 29, 2006, the Council issued its *Final Order in the Matter of the Fifth Request to*
18 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
19 Amendment 5), approving construction of a secondary natural gas pipeline connecting the
20 Facility to the existing NW Natural Beaver Lateral Pipeline.

21
22 On March 27, 2009, the Council issued its *Final Order in the Matter of the Sixth Request to*
23 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
24 Amendment 6), granting a 24-month extension of the deadline for completion of construction
25 of Unit 1.

26
27 On March 12, 2010, the Council issued its *Final Order in the Matter of the Seventh Request to*
28 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
29 Amendment 7), approving construction of Unit 2 as reciprocating engine generator sets to
30 produce a non-base-load power and expanding the site boundary to include 8.5 acres of land
31 that was temporarily disturbed during construction of Unit 1. Final Order on Request for
32 Amendment 7 also approved a transfer of water from the certificate holder's water right for the
33 Trojan plant to the Port Westward intake.

34
35 On August 19, 2011, the Council issued its *Final Order in the Matter of the Eighth Request to*
36 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
37 Amendment 8), granting a 24-month extension of the deadline for completion of construction
38 of Unit 2.

39
40 On March 15, 2013, the Council issued its *Final Order in the Matter of the Ninth Request to*
41 *Amend the Site Certificate for the Port Westward Generating Project* (Final Order on Request for
42 Amendment 9), approving extensions of the deadlines to complete construction of Unit 2 and
43 to complete changes and make full beneficial use of water under the water rights transfer
44 approved in Final Order on Request for Amendment 7. -Final Order on Request for Amendment

1 9 also approved changes to Site Certificate Condition D.8(8) to include procedures for wildlife
2 surveys and rescue and relocation of nongame wildlife during construction of Unit 2.

3
4 On August 23, 2013, the Council issued its *Final Order in the Matter of the Tenth Request to*
5 *Amend the Site Certificate* (Final Order on Request for Amendment 10), expanding the site
6 boundary to include three temporary laydown areas for use in construction of Unit 2.

7 In 2015, the Legislative Assembly enacted HB 2193, directing electric companies to submit
8 proposals to the Oregon Public Utility Commission for energy storage systems that have the
9 capacity to store at least five megawatt hours of energy. The bill requires electric companies to
10 procure systems authorized by the PUC on or before January 1, 2020. In November 2017,
11 certificate holder filed a project proposal with the PUC for five energy storage projects,
12 including the project that is the subject of this request.

13
14 Certificate holder submitted its preliminary *Request for Amendment 11* on April 23, 2019. The
15 Department received the complete Request on July 12, 2019. On July 18, 2019, the Department
16 posted the complete Request on its website and posted an announcement on the project
17 website informing the public that the complete Request had been received and is available for
18 viewing.

19
20 The Department received comments on the Request from Columbia County (Special Advisory
21 Group) on July 11, 2019; and from ODFW on July 26, 2019. These comments are incorporated
22 into the Department’s analysis of Council standards in Section III. REVIEW OF THE REQUESTED
23 AMENDMENT~~III. REVIEW OF THE REQUESTED AMENDMENT~~, and are provided in Attachment B:
24 Reviewing Agency Comments on Request for Amendment 11.

25 26 **II. AMENDMENT PROCESS**

27 28 **II.A. Requested Amendment**

29 Certificate holder requests that Council amend the site certificate to allow construction and
30 operation of a 4 to 6 MW battery energy storage system (BESS) as a related or supporting
31 facility within the existing facility site boundary. If approved, certificate holder expects
32 construction of the BESS to begin no later than the third quarter of 2020 and to be completed
33 within one year of its start.

34
35 Certificate holder requests approval to construct the facility using either lithium-ion or flow
36 battery technology. The certificate holder explains the two technologies in Section 4 of *Request*
37 *for Amendment 11*:

38
39 “Lithium-ion batteries are rechargeable, solid-state batteries that stores energy in a
40 solid electrode material, such as metal. Each battery cell has a cathode (a positive
41 electrode), an anode (a negative electrode), and an electrolyte as the conductor. The
42 anode material is typically graphite. The cathode material varies, and it defines the
43 battery. Common cathode materials for a utility-scale battery storage system include Li
44 cobalt oxide (lithium cobaltate), Li manganese oxide (Li manganate), Li iron phosphate,

1 Li nickel manganese Cobalt (NMC), and Li nickel cobalt aluminum oxide (NCA). The
2 electrolyte is the transport medium that allows lithium ions carrying the battery's
3 charge to flow freely between the cathode and anode. The electrolyte is an organic
4 solvent with dissolved lithium salt. Its composition depends on the selected cathode and
5 anode combination. It is also what makes the battery flammable.”
6

7 “Flow Batteries are rechargeable batteries that store energy in electrolyte liquids. The
8 battery uses two liquids, one with a negatively charged cathode and one with a
9 positively charged anode. These electrodes are separated by a membrane. When
10 charging, the electrons are pulled from the positive solution and pushed into the
11 negative solution. When the battery turns on, the electron flow reverses. Flow batteries
12 come in a variety of chemistries: vanadium, iron chromium, zinc bromine, zinc iron and
13 the batteries can be redox, hybrid, and membraneless.”¹
14

15 Certificate holder explains under either option, the BESS would be a factory-built system
16 consisting of batteries, battery enclosures, inverters, an interconnection system, step-up
17 transformers, battery management system, energy management system, fire detection and
18 suppression, and all required programming for integration. The battery enclosures would
19 consist of modular containers that are approximately 44 feet by 10 feet by 10 feet. In a flow
20 battery system, two battery containers could be stacked increasing the height to approximately
21 20 feet. Each modular container would include an HVAC system and a fire detection and
22 suppression system. All wiring connecting the modular containers with other system
23 components would be in underground conduit. Certificate holder notes that the number and
24 layout of modular containers, inverters, and transformers may depend on technology and will
25 be determined in pre-construction.
26

27 Certificate holder proposes the switchgear in the existing switchyard as the point of
28 interconnect between the BESS and the certificate holder’s general transmission grid. The
29 transmission grid would recharge the BESS, and the BESS would discharge back to the grid when
30 it is not used as spinning reserve for Unit 2 of the facility. The certificate holder has identified a
31 90 foot by 100 foot paved area adjacent to the switchyard as the likely location of the proposed
32 BESS. The certificate holder has proposed new switchyard dimensions in Section C.1.a of the
33 site certificate to reflect the potential fence realignment if the facility is located adjacent to the
34 existing switchyard.
35

36 The certificate holder proposes to limit access to the BESS with multiple layers of security. To
37 enter the facility site, all vehicles must pass through a guard station or badge-access crossing
38 gate at the entrance to the Port Westward Industrial Park, and a security gate at the entrance
39 to the facility itself. The certificate holder proposes to locate the BESS within an additional layer
40 of fencing to allow only personnel who have received appropriate training and approved
41 maintenance contractors to enter. The proposed BESS would be designed to be completely

¹ Request for Amendment 11, pp. 7-8.

1 automated, and to be remotely monitored by the certificate holder through ~~s~~Supervisory
2 ~~e~~Control -and ~~d~~Data ~~a~~Acquisition technology (SCADA).

3
4 The certificate holder proposes to use previously approved laydown and parking areas during
5 construction. The certificate holder also proposes to use existing access roads during
6 construction and operation of the facility, and states that no additional temporary or
7 permanent roads will be required. The certificate holder proposes to use a previously-approved
8 temporary disturbance area for spoils disposal. The Council previously approved this area for
9 use during construction of Units 1 and 2 in its *Final Order on Request for Amendment 3*.

10
11 Certificate holder proposes several additional modifications to the site certificate that are not
12 specific to the BESS:

- 13
14 1. Administrative corrections to Section C.1(a) and C.1(b) of the site certificate:
- 15 a. Clarifying that non-base load generation is a separate use from power
16 augmentation.
 - 17 b. Providing a missing dimension for the Unit 1 turbine building.
 - 18 c. Correcting the number, size, and types of water storage tanks to include a
19 400,000 fire water/service tank for Unit 1, a 400,000 fire water storage tank for
20 Unit 2, and a 40,000 demineralized water storage tank.
 - 21 d. Correcting the capacity of the Kelso-Beaver Pipeline from 193,000 decatherms
22 per day to 200,913 decatherms per day.
- 23 2. Modification of Condition D.6(7) to allow use of secondary containment options that do
24 not require installation of permanent pavement.
- 25 3. Modification of Conditions D.6(26) to remove the revegetation success criteria to a
26 Revegetation and Noxious Weed Control Plan controlled by proposed Condition D.6(28).
- 27 4. Modification of Condition D.8(11) pertaining to wetland buffers.
- 28 5. Removal of Condition D.9(9) related to bald eagles.
- 29

30 **II.B. Amendment Review Process**

31 On August 22, 2019, the Council adopted temporary rules governing the process for amending
32 site certificates. The temporary rules are in effect until February 17, 2020. Among~~st~~ other
33 changes, the temporary rules replaced the amendment processing rules contained in OAR 345,
34 Division 27. ~~The temporary rules also include renumbering the Division 27 ruleset to govern site~~
35 ~~certificate amendment processing.~~ The temporary rules include rules numbered in the Division
36 27, “-0300” series. References in this DPO-Order reflect the temporary rule numbering.
37 However, rule references in the preliminary and complete requests for amendment, submitted
38 by PGE prior to the August 22, 2019 adoption of temporary rules, include reference to the prior
39 Division 27 rules~~et~~.

40
41 As stated in OAR 345-027-0311(1), “The rules in this division apply to all requests for
42 amendment to a site certificate and amendment determination requests for facilities under the
43 Council's jurisdiction that are submitted to, or were already under review by, the Council on or
44 after the effective date of the rules. The Department and Council will continue to process all

1 requests for amendment and amendment determination requests submitted on or after
2 October 24, 2017 for which Council has not made a final decision prior to the effective date of
3 these rules, without requiring the certificate holder to resubmit the request or to repeat any
4 steps taken as part of the request prior to the effective date of these rules.” This reference
5 includes the review at hand, the Port Westward Generating Project Request for Amendment
6 11.

7
8 A site certificate amendment is necessary under OAR 345-027-0350(4) because the certificate
9 holder requests to design, construct, and operate the facility in a manner different from the
10 description in the site certificate, and the proposed changes: (a) could result in a significant
11 adverse impact to a resource or interest protected by a Council standard that the Council has
12 not addressed in an earlier order; (b) could impair the certificate holder’s ability to comply with
13 a site certificate condition; or (c) could require new conditions or modification to existing
14 conditions in the site certificate, or could meet more than one of these criteria.

15
16 OAR 345-027-03351 describes the processes for review of a request for amendment. Under
17 OAR 345-027-0351(2), the Type A review process is the default review process for a request for
18 an amendment required under OAR 345-027-0350(4). Because the certificate holder did not
19 request a Type B review process, the Department is reviewing the Request under the default
20 Type A review process.

21
22 Under OAR 345-027-0360(3), the analysis area for any Council standard that requires evaluation
23 of impacts within an analysis area is the larger of either the study areas as defined in OAR 345-
24 001-0000(59) or the analysis areas described in the project order for the facility, unless
25 otherwise approved in writing by the Department following a pre-amendment conference. On
26 March 29, 2019, and April 4, 2019, the Department approved, in writing, use of analysis areas
27 based on the existing site boundary for the energy facility and spoils disposal area only, because
28 other related and supporting facilities described in Section C.2.b of the site certificate would
29 not be impacted by the changes proposed in *Request for Amendment 11*. On August 29, 2019
30 the Department issued a Second Amended Project Order, which specifies that Exhibit F must list
31 property owners within 250 feet of the proposed facility, which is the site boundary for the
32 energy facility (the generating plant), but excluding the transmission line that is considered a
33 related or supporting facility component.

34 35 **II.C. Council Review Process**

36 Under the Type A process, the issuance of the ~~eis~~ Draft Proposed Order (DPO) on August 29, 2019
37 initiates-initiated a comment period on the record of the proposed amendment. Notice of a
38 public hearing on the request for amendment and the DPO and the public comment deadline,
39 was issued concurrently with the DPO. The notice was sent to persons on the Council’s general
40 mailing list, persons on the special mailing list established for the facility, to reviewing agencies
41 as defined in OAR 345-001-0010(52), and to the property owner described in OAR 345-021-
42 0010(1)(f).
43

1 The comment period ~~extends-extended~~ through the close of the public hearing ~~scheduled to~~
2 ~~occur~~ on September 26, 2019 ~~at 5:00 pm~~ in Clatskanie, Oregon, and as described below, the
3 comment period was held open until September 27, 2019, so that clarifying information could
4 be provided by Ms. Irene Gilbert, and responded to by the certificate holder. In addition to
5 accepting written comments during the comment period, the Council ~~will also-accepted~~ oral
6 testimony at the public hearing. ~~The record of the draft proposed order will close at the~~
7 ~~conclusion of the public hearing on September 26, 2019, as described in the Notice.~~

8
9 The Council received one written comment letter from a reviewing agency prior to the close of
10 the public record.² One person, Ms. Irene Gilbert, provided oral testimony at the public hearing.
11 The Council held the record open until September 27, 2019 at 8:00 so that Ms. Gilbert could
12 provide written clarification of her testimony and supporting materials to the Council and so
13 that the certificate holder could respond to the public comments received. The certificate
14 holder provided responses to both the comment letter and the oral testimony. The written
15 comments and certificate holder responses are included in Attachment C: Draft Proposed Order
16 Comments/Index. On September 27, 2019, the Council reviewed the Draft Proposed Order and
17 the substantive issues raised during the public comment period.

18
19 ~~Following the close of the record of the public hearing and Council's review of the draft~~
20 ~~proposed order, t~~The Department ~~will issues a this p~~Proposed ~~e~~Order, taking into consideration
21 all Council comments, as well as the public, reviewing agency, and certificate holder comments
22 described above. any comments received "on the record of the public hearing" (i.e., oral
23 testimony provided at the public hearing and written comments received by the Department
24 after the date of the notice of the public hearing and before the close of the public hearing
25 comment period), including any comments from reviewing agencies, special advisory groups,
26 and Tribal Governments.

27
28 Concurrent with the issuance of the ~~is p~~Proposed ~~e~~Order, the Department will issue a notice of
29 contested case and a public notice of the proposed order.³ Only those persons who commented
30 in person or in writing on the record of the public hearing may request a contested case
31 proceeding, unless the Department did not follow the follow the requirements of OAR 345-027-
32 0367, or unless the action recommended in the proposed order differs materially from the draft
33 proposed order (including any recommended conditions of approval, in which case the person
34 may raise only new issues within the jurisdiction of the Council that are related to such
35 differences). Additionally, to raise an issue in a contested case proceeding, the issue must be
36 within Council jurisdiction, and the person must have raised the issue on the record of the
37 public hearing with "sufficient specificity to afford the Council, the Department, and the

² The comment, from the Oregon Department of Environmental Quality, raised several questions about permitting requirements. Several of these permits noted by DEQ in its comment letter are discussed by the certificate holder in Section 5.1 of Request for Amendment 11; however, because federally-delegated permits are not under Council jurisdiction, they are not discussed in this Order. Requirements for Removal/Fill permits, which are under Council jurisdiction, are discussed in Section III.Q.2. Removal-Fill.

³ See OAR 345-027-0371.

1 certificate holder an adequate opportunity to respond to the issue.”⁴ If the Council finds that a
2 request for contested case identifies one or more properly raised issues that justify a contested
3 case proceeding, the Council shall conduct a contested case proceeding on the proposed order.

4
5 Following the conclusion of any contested case granted on the proposed order, the Council will
6 adopt, modify or reject the proposed order and will issue a final order approving or denying the
7 site certificate amendment request based upon ~~In making a decision to grant or deny issuance~~
8 ~~of an amended site certificate, the Council shall apply~~ the applicable laws and Council standards
9 required under OAR 345-027-0375(2) and in effect on the dates described in OAR 345-027-
10 0375(3).

11
12 The Council’s final order approving or rejecting a request for an amended site certificate is
13 subject to judicial review by the Oregon Supreme Court. A petition for judicial review of the
14 Council’s approval or rejection of an application for an amended site certificate must be filed
15 with the Supreme Court within 60 days after the date of service of the Council’s final order or
16 within 30 days after the date of a petition for rehearing is denied or deemed denied.⁵

17 18 **III. REVIEW OF THE REQUESTED AMENDMENT**

19 The Council has adopted the standards contained in OAR chapter 345 to ensure the siting,
20 construction, operation and retirement of energy facilities is accomplished in a manner
21 consistent with protection of public health and safety and in compliance with the energy policy
22 and air, water, solid waste, land use and other environmental protection policies of this state.⁶
23 The Department recommends Council ~~will~~ include conditions in the amended site certificate to
24 ensure compliance with applicable standards, statutes, and rules.⁷ This ~~Draft~~-Proposed Order
25 recommends findings of fact, conclusions of law, and conditions of approval concerning the
26 amended facility’s compliance with the standards, statutes and rules, based on the information
27 in the record.

28
29 ~~Following the written comment period and hearing on the draft proposed order, the~~
30 ~~Department will issue its proposed order, which will include the Department’s consideration of~~
31 ~~the comments and any additional evidence received on the record of the draft proposed order.~~

32 33 **III.A. General Standard of Review: OAR 345-022-0000**

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

37
38 *(a) The facility complies with the requirements of the Oregon Energy Facility Siting*
39 *statutes, ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards*
40 *adopted by the Council pursuant to ORS 469.501 or the overall public benefits of the*

⁴ OAR 345-027-0371(7).

⁵ ORS 469.403 and OAR 345-027-0371(12).

⁶ See ORS 460.310, 469.470.

⁷ ORS 469.401(2).

1 *facility outweigh the damage to the resources protected by the standards the facility*
2 *does not meet as described in section (2);*

3
4 *(b) Except as provided in OAR 345-022-0030 for land use compliance and except for*
5 *those statutes and rules for which the decision on compliance has been delegated by the*
6 *federal government to a state agency other than the Council, the facility complies with*
7 *all other Oregon statutes and administrative rules identified in the project order, as*
8 *amended, as applicable to the issuance of a site certificate for the proposed facility. If*
9 *the Council finds that applicable Oregon statutes and rules, other than those involving*
10 *federally delegated programs, would impose conflicting requirements, the Council shall*
11 *resolve the conflict consistent with the public interest. In resolving the conflict, the*
12 *Council cannot waive any applicable state statute.*

13
14 *****

15
16 *(4) In making determinations regarding compliance with statutes, rules and ordinances*
17 *normally administered by other agencies or compliance with requirement of the Council*
18 *statutes if other agencies have special expertise, the Department of Energy shall consult*
19 *such other agencies during the notice of intent, site certificate application and site*
20 *certificate amendment processes. Nothing in these rules is intended to interfere with the*
21 *state's implementation of programs delegated to it by the federal government.*

22
23 **Findings of Fact**

24 OAR 345-022-0000(1) requires the Council to find that a preponderance of evidence on the
25 record supports the conclusion that the facility, with proposed changes, would comply with the
26 requirements of ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the standards
27 adopted by the Council pursuant to ORS 469.501 and that the facility, with proposed changes,
28 would comply with all other Oregon statutes and administrative rules applicable to the issuance
29 of an amended site certificate for the facility.⁸

30
31 The requirements of OAR 345-022-0000(1)(a) are discussed in sections III.B. Organizational
32 Expertise: OAR 345-022-0010~~III.B. Organizational Expertise: OAR 345-022-0010~~ through III.P.
33 Division 24 Standards~~III.P. Division 24 Standards~~. In these sections, the Department
34 recommends that Council finds the facility, with the proposed changes would continue to
35 comply with the requirements of ORS 469.300 to ORS 469.570 and 469.590 to 469.619, and the
36 standards adopted by the Council under ORS 469.501.

37

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

1 Section ~~III.Q. Other Applicable Regulatory Requirements Under Council Jurisdiction~~~~III.Q. Other~~
2 ~~Applicable Regulatory Requirements Under Council Jurisdiction~~, discusses the requirements of
3 OAR 345-022-0000(1)(b). In this section, the Department recommends the Council find the
4 facility, with the proposed changes would continue to comply with the requirements of with
5 statutes, rules and ordinances otherwise administered by other agencies.
6

7 The Department consulted with the Oregon Department of Fish and Wildlife and the Columbia
8 County Board of Commissioners during review of the Request to aid in the evaluation of
9 whether the facility, with the proposed changes, would maintain compliance with statutes,
10 rules and ordinances otherwise administered by other agencies. Additionally, in many
11 circumstances the Department relies upon these reviewing agencies' special expertise in
12 evaluating compliance with the requirements of Council standards.
13

14 Certificate Expiration (OAR 345-027-0013)

15 A site certificate, or amended site certificate, becomes effective upon execution by the Council
16 Chair and the certificate holder. A site certificate, or amended site certificate, expires if
17 construction has not commenced on or before the construction commencement deadline, as
18 established in the site certificate and statutorily required under ORS 469.401(2).
19

20 In Section 4 of the *Request for Amendment 11*, the certificate holder states that it anticipates
21 construction of the BESS to begin no later than the third quarter of 2020 and to end
22 within one year of its start. While the Department agrees that these are reasonable
23 timeframes considering the size of the proposed changes and the past experience of the
24 certificate holder; the Department recommends Council grant construction commencement
25 and completion deadlines based upon three and six years following the date of Council
26 approval. This timeframe would be consistent with historic Council decisions and represents a
27 reasonable timeframe while allowing for delays resulting from unforeseen factors, such as
28 financial, economic, or technological changes. To ensure compliance with this recommended
29 timeline, the Department recommends Council adopt the following new Site Certificate
30 Conditions:
31

32 F.1(7) The Certificate Holder shall begin construction of the BESS by [Insert Date 3 years
33 from Effective Date].

34
35 F.1(8) The Certificate Holder shall complete construction of the BESS by [Insert Date 6
36 years from Effective Date].

37 38 **Conclusions of Law**

39 Based on the foregoing findings of fact and conclusions of law, and subject to compliance with
40 the existing and recommended new and amended site certificate conditions the Department
41 recommends that the Council find that the facility, with proposed changes, would continue to
42 satisfy the requirements of OAR 345-022-0000.

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

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

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

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

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

Findings of Fact

Under OAR 345-022-0010(1), to conclude that the applicant meets the Organizational Expertise Standard, the Council must find “that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non-hazardous condition.”

1 The certificate holder is an investor owned utility that has been operating in Oregon for 129
2 years. The certificate holder owns and operates multiple generating and non-generating
3 facilities in Oregon, including several energy facilities subject to Council jurisdiction.
4

5 In the *Final Order on the Application* for the original Port Westward power plant, the Council
6 found that the certificate holder has the organizational expertise to construct, operate and
7 retire the facility in compliance with the Council standards and the conditions of the site
8 certificate. The Council adopted conditions in section D.2 of the site certificate to ensure
9 compliance with the Organizational Expertise standard.⁹
10

11 Since 2013, the certificate holder has operated and maintained the Salem Smart Power Center
12 (SSPC), a 5-MW lithium-ion battery system in Salem, Oregon. The SSPC is used both as a
13 research and development facility and as an operating grid asset. Certificate holder attests that
14 it has operated the center for five years with no fires and no regulatory citations or complaints
15 or concerns from neighbors.¹⁰
16

17 Certificate holder also relies upon access to additional expertise from the use of third-party
18 contractors. The certificate holder explains that it will use an engineering, procurement and
19 construction (EPC) contractor to construct and maintain the proposed BESS. A third-party
20 contractor would also provide maintenance for the BESS.¹¹
21

22 The Department recommends that several existing site certificate conditions apply to the
23 construction and operation of the BESS. Site Certificate Condition D.2(2) requires the certificate
24 holder to identify the EPC contractor it has chosen for specific portions of the work. Under Site
25 Certificate Condition D.2(3), certificate holder must submit to the Council the identity of the
26 contractor so that Council may review the qualifications and capability of the contractor to
27 meet the standards of OAR 345-0022-0010.
28

29 Under Site Certificate Condition D.2(5), the certificate holder must contractually require all
30 contractors involved in the construction and operation of the facility to comply with all
31 applicable laws and regulations and with the terms and conditions of the site certificate. Such
32 contractual provisions do not relieve the certificate holder of responsibility for compliance with
33 the site certificate, and the certificate holder would remain liable for any violation or penalty as
34 provided under Site Certificate Condition D.2(4).
35

36 In *Request for Amendment 11*, the certificate holder states that the contractor will provide
37 classroom and hands-on training covering the operation and maintenance of the BESS to
38 certificate holder's Staff.¹² Consistent with this certificate holder representation, the
39 Department recommends the Council include the following new Condition:
40

⁹ Final Order on the Application, p. 43.

¹⁰ Request for Amendment 11, p. 18.

¹¹ Request for Amendment 11, p. 19.

¹² Request for Amendment 11, p. 19.

1 D.2(10) Before beginning operation of the BESS, the certificate holder shall submit to
2 the Department, the plan or curriculum covering operation and maintenance of the
3 BESS that demonstrates certificate holder’s staff will receive adequate training to
4 operate and maintain the BESS in a manner that protects public health and safety.
5

6 *Transportation and handling of hazardous materials*

7 In Sections 5.1 and 8.12.7 of *Request for Amendment 11*, the certificate holder explains that
8 transportation and handling of lithium-ion batteries is subject to 49 CFR 173.185 and ORS
9 453.825.¹³ The regulations include requirements for the prevention of a dangerous evolution of
10 heat, short circuits, and damage to the terminals, and require that no battery come in contact
11 with other batteries or conductive materials.

12
13 The certificate holder proposes to rely upon the expertise of third-party contractors to handle
14 and transport batteries and battery waste and to minimize impacts of the BESS on the
15 certificate holder’s ability to construct and operate the facility in a manner that protects public
16 health and safety. The Council adopted conditions in section D.2 of the site certificate to ensure
17 the certificate holder requires contractors to comply with applicable laws and regulations.
18

19 Under existing Site Certificate Condition D.2(5), the certificate holder must ensure contractors
20 involved with construction and operation of the facility, including the BESS, comply with 49 CFR
21 173.185 and ORS 453.825. The Department recommends Council amend the condition as
22 follows to clarify its applicability to contractors involved in the transportation and disposal of
23 batteries:
24

25 D.2(5) The Certificate Holder shall contractually require ~~the any~~ EPC contractor(s), ~~and~~
26 ~~all~~ independent contractors, and subcontractors involved in the construction, ~~and~~
27 operation, ~~or retirement~~ of the facility, including contractors involved in the
28 transportation and disposal of batteries and battery wastes, to comply with all
29 applicable laws and regulations and with the terms and conditions of the Site Certificate.
30 Such contractual provision shall not operate to relieve the Certificate Holder of
31 responsibility under the Site Certificate.”
32

33 Certificate holder explains that adherence to the requirements and regulations, personnel
34 training, safe interim storage, and segregation from other potential waste streams will
35 minimize any public hazard related to transport, use, or disposal of the batteries. Under existing
36 site certificate conditions D.3(7) and D.3(8), the certificate holder must prepare construction
37 and operational material management and monitoring plans and submit the plans to the
38 Council for approval. The certificate holder has proposed to amend these conditions to address
39 the BESS. The Department recommends incorporating these amendments and the following
40 changes:
41

¹³ Request for Amendment 11, pp. 12-.

1 D.3(7) Before beginning construction of the energy facility or BESS, the Certificate
2 Holder shall prepare and submit to the Department a materials management and
3 monitoring plan that addresses handling and transportation of hazardous substances,
4 the measures it will implement to prevent site contamination, and how it will document
5 implementation of the plan during construction. The materials management and
6 monitoring plan shall be subject to approval by the Department. For the purpose of this
7 condition and Conditions D.3(8), D.3(10), D.3(11), and D.3(12) below, the terms
8 “release” and “hazardous substances” shall have the meanings set forth at ORS 465.200.
9

10 D.3(8) Before beginning operation of the energy facility or BESS, the Certificate Holder
11 shall prepare and submit to the Department a materials management and monitoring
12 plan that addresses the handling and transportation of hazardous substances, the
13 measures it will implement to prevent site contamination, and how it will document
14 implementation of the plan during operation. The materials management and
15 monitoring plan shall be subject to approval by the Department.
16

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

18 The certificate holder’s ability to restore the facility site to a useful, non-hazardous condition is
19 evaluated in Section III.G. Retirement and Financial Assurance: OAR 345-022-0050~~III.G.
20 Retirement and Financial Assurance: OAR 345-022-0050~~, in which the Department recommends
21 that Council find that the certificate holder would continue to be able to comply with the
22 Retirement and Financial Assurance standard.
23

24 *ISO 900 or ISO 14000 Certified Program*

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

29 *Third-Party Permits*

30 OAR 345-022-0010(3) addresses the requirements for potential third-party contractors. In
31 Section 5.1 of *Request for Amendment 11*, certificate holder proposes that the addition of the
32 BESS does not require any different permits from those previously identified in the Final Order
33 on the Application for site certificate and subsequent amendments.¹⁴
34

35 **Conclusions of Law**

36 Based on the evidence in the record, and subject to compliance with the existing,
37 recommended new and amended conditions, the Department recommends that the Council
38 find that the certificate holder would continue to satisfy the requirements of the Council’s
39 Organizational Expertise standard.
40

¹⁴ Request for Amendment 11, p. 12.

1 **III.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 characterized*
7 *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, as*
11 *identified in subsection (1)(a);*

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

20
21 *(2) The Council may not impose the Structural Standard in section (1) to approve or deny*
22 *an application for an energy facility that would produce power from wind, solar or*
23 *geothermal energy. However, the Council may, to the extent it determines appropriate,*
24 *apply the requirements of section (1) to impose conditions on a site certificate issued for*
25 *such a facility.*

26
27 *(3) The Council may not impose the Structural Standard in section (1) to deny an*
28 *application for a special criteria facility under OAR 345-015-0310. However, the Council*
29 *may, to the extent it determines appropriate, apply the requirements of section (1) to*
30 *impose conditions on a site certificate issued for such a facility.*

31
32 **Findings of Fact**

33 Under OAR 345-022-0020(1), the Council must evaluate whether the certificate holder has
34 adequately characterized the potential seismic, geological and soil hazards of the site, and
35 whether the certificate can design, engineer and construct the facility to avoid dangers to
36 human safety and the environment from these hazards. The analysis area for the Structural
37 Standard is the area within the site boundary.

38
39 In the *Final Order on the Application*, the Council found that the design, construction and
40 operation of PWGP would meet the Council’s Structural Standard. The Council adopted
41 conditions in section D.5 of the site certificate to ensure compliance with the Structural
42 Standard.¹⁵

¹⁵ Final Order on the Application, pp. 56-64.

1
2 In the *Final Order on Amendment 7*, the Council found that the design, construction, and
3 operation of the reconfigured Unit 2 would meet the Council’s Structural Standard, taking into
4 account the conditions adopted in section D.5 of the site certificate.¹⁶

5
6 Section 8.2 of *Request for Amendment 11* includes an analysis to establish that the facility, with
7 the proposed changes, would comply with the Structural standard. As discussed in that section,
8 the proposed amendment would not modify previously-approved structures as part of the
9 facility; however, it would result in new structures being constructed within the site boundary.
10 Accordingly, the analysis in this section is limited to the potential seismic, geological, and soil
11 hazards associated with these new structures and supporting foundations.

12
13 *Potential Seismic, Geological and Soil Hazards*

14 On behalf of the certificate holder, Cornforth Consultants Inc. (CCI) conducted a geotechnical
15 study for Unit 1 in 2002. In 2013, prior to construction of Unit 2, Black & Veatch reviewed the
16 CCI study, then conducted a seismic study evaluation, and performed additional borings.¹⁷ The
17 studies describe the potential seismic, geological, and soil hazards at the site. Of note, the study
18 finds that the site has high potential for liquefaction and some susceptibility to lateral
19 spreading. Ground improvement consisting of 40-foot stone columns were used to address
20 these hazards for Unit 1 and Unit 2.

21
22 *Dangers to Human Safety from Seismic and Non-Seismic Hazards*

23 During its consultation with DOGAMI, the certificate holder confirmed that the geotechnical
24 data and borings provided in these studies are still valid; however, DOGAMI noted that the
25 design requirements have changed and requested that the contractor’s engineer of record
26 address the liquefaction potential and seismic hazards relevant to a magnitude 9 earthquake
27 using current and updated information. In Section 8.2 of *Request for Amendment 11*, the
28 certificate holder states in that the BESS will be designed to current codes and the seismic
29 design data will be based on current code values as required by existing site certificate
30 Condition D.5(1). The certificate holder states that it will not require its contractor to conduct
31 or obtain additional geotechnical studies, however, if the contractor determines that additional
32 studies are needed it will provide the information to the Department and DOGAMI for the
33 record.

34
35 The Department agrees that additional geotechnical studies are not specifically necessary for
36 the BESS, considering that the design and construction of the Port Westward power plant was
37 based on geotechnical data collected recently and that potential risks to the environment or
38 human safety from the proposed BESS are likely to be small. However, in the event that the
39 certificate holder’s contractor conducts additional geotechnical investigations in support of the
40 BESS, the certificate holder proposes a new site certificate condition to requires that the results
41 of that study be provided to the Department and DOGAMI, and that the study conform with

¹⁶ Final Order on Request for Amendment 7, pp. 11-12.

¹⁷ Request for Amendment 11, Att. 1, p. 1.

1 DOGAMI guidelines for conducting such studies. The Department recommends Council include
2 this condition in the amended site certificate:

3
4 D.5(10) If additional geotechnical investigations are performed for the design of the
5 BESS, the certificate holder shall provide the Department and DOGAMI with a report
6 containing the results of the investigation. The report shall conform to Oregon State
7 Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports.

8
9 **Conclusions of Law**

10 Based on the foregoing analysis, and subject to existing and recommended amended
11 conditions, the Department recommends the Council find that the facility, as modified by
12 *Request for Amendment 11*, would continue to comply with the Structural Standard.

13
14 **III.D. Soil Protection: OAR 345-022-0022**

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

20
21 **Findings of Fact**

22 The Soil Protection standard requires the Council to find that, taking into account mitigation,
23 the design, construction and operation of a facility, with proposed changes, are not likely to
24 result in a significant adverse impact to soils.

25
26 In the *Final Order on the Application*, the Council found that the design, construction and
27 operation of the facility would not result in a significant adverse impact to soils. The Council
28 adopted conditions in section D.6 of the site certificate to ensure compliance with the Soil
29 Protection standard.¹⁸

30
31 **Potential Significant Adverse Impacts to Soils**

32 The analysis area for potential impacts to soils is the area within the site boundary and the
33 existing spoils disposal area. Potential impacts to soils within the analysis area (site boundary)
34 include erosion during ground disturbance during construction and operation of the proposed
35 battery energy storage system, and chemical spills from batteries, transformers, or other
36 system components.

37
38 The proposed location of the BESS is currently paved. In Section 8.3 of *Request for Amendment*
39 *11*, certificate holder explains that existing pavement may be replaced during ground
40 improvements to improve foundation support and seismic resistance. Clean soils removed
41 during excavation may be disposed of at the spoils disposal area.¹⁹

¹⁸ *Final Order on the Application*, pp. 64-70.

¹⁹ *Request for Amendment 11*, p. 23.

1
2 Certificate holder states that it will comply site certificate conditions related to Soil Protection
3 applicable to *Request for Amendment 11*. The certificate holder suggests, and the Department
4 confirms, that these include Conditions D.6(1) through (9).

5
6 Site certificate condition D.6(2)(a) requires the certificate to avoid excavation and other soil
7 disturbances beyond that necessary for construction of the facility or confine equipment use to
8 specific areas. Certificate holder estimates that replacement of the existing pavement would
9 result in disturbance of less than one acre of soil at the proposed BESS location, the spoils
10 disposal area, and areas needed to maneuver equipment. In addition, certificate holder would
11 confine equipment use to previously disturbed areas at the BESS site, and would access the
12 spoils disposal area from existing paved and gravel roads limiting the amount of soil
13 compaction that will need to be addressed during revegetation.²⁰

14
15 In the *Final Order on the Application*, the Council adopted conditions in section D.6 of the site
16 certificate to ensure compliance with the Soil Protection standard.²¹ Existing Site Certificate
17 Conditions D.6(1) through D.6(6) impose measures to control soil erosion and sediment runoff
18 during construction, and to revegetate and monitor disturbed sites post-construction. These
19 conditions apply to all soil disturbing activities at the facility and would apply to construction
20 and operation of the BESS.

21
22 While it is possible that some adverse impacts to soils could occur during construction,
23 operation, or decommissioning of the proposed battery energy storage system from leakage or
24 spills of battery cell electrolyte fluid, oil, or other contaminants, the risks may be minimized by
25 proper handling of equipment and materials, and locating the BESS within a paved area that is
26 graded to divert runoff to on-site retention ponds.

27
28 In Section 8.3 of *Request for Amendment 11*, the certificate holder explains that the battery
29 modules will be factory built and fully enclosed when they arrive at the facility. Certificate
30 holder also states that the modular containers would act as secondary containment if a battery
31 leaks or spills fluid during a potential equipment malfunction or improper handling.
32 Additionally, the certificate holder states that if oil-filled transformers that trigger EPA's Spill
33 Prevention, Control, and Countermeasure (SPCC) requirements for containment, they will be
34 kept in secondary containment.²²

35
36 Certificate holder explains that in the event that a fluid did escape secondary containment, the
37 proposed location of the BESS is paved asphalt and graded, so that all storm water remains on-
38 site and flows to one of four on-site storm water retention ponds, where it is contained and can
39 be cleaned up.

40

²⁰ Ibid.

²¹ Final Order on the Application, pp. 64-70.

²² Request for Amendment 11, p. 24.

1 The certificate holder has proposed a modification to Site Certificate Condition D.6(7) to allow
2 for the use of secondary containment options that do not require installation of permanent
3 pavement. The proposed change to the condition is as follows:

4
5 D.6(7) The certificate holder shall contain all fuel and chemical storage in paved spill
6 containment areas with a curb, or appropriately sized and compatible secondary
7 containment.
8

9 In its response to the Request for Additional Information issued by the Department on May 28,
10 2019, the certificate holder explained that the modification “was not intended to be specific to
11 just the addition of battery storage” adding that the condition does not allow for other
12 common methods of secondary containment such as spill containment pallets, collapsible
13 berms or oil/water separators.
14

15 The Department agrees that this proposed change may allow the certificate holder greater
16 flexibility for the storage of fuel and chemicals at the facility without substantially increasing
17 the risk of contaminants being released into the environment; however, the proposed
18 modification relies on secondary containment being “appropriately sized and compatible.”
19 While certificate holder in RFA11 does not explain what the terms “appropriately sized” or
20 “compatible” mean or how existing site certificate conditions related to spill containment areas
21 would apply to the proposed secondary containment, existing Site Certificate Conditions D.6(8)
22 and (9) do specify the appropriate sizes for spill containment areas, and the Department
23 recommends that these conditions also apply to any secondary containment deployed by the
24 certificate holder outside of curbed-containment areas. Existing Site Certificate Conditions
25 D.3(8) requires the certificate holder to prepare and submit a *Hazardous Materials*
26 *Management and Monitoring Plan* which addresses the handling of hazardous wastes, including
27 fuels and chemicals, and the measures the certificate holder will implement to prevent site
28 contamination. The Department recommends the following edits to the certificate holder’s
29 proposed change to clarify the applicability of these provisions to secondary containment:
30

31 D.6(7) The certificate holder shall contain all fuel and chemical storage in paved spill
32 containment areas with a curb, or appropriately sized and compatible secondary
33 containment, in a manner consistent with the Hazardous Materials Management and
34 Monitoring Plan for the facility.
35

36 D.6(8) The Certificate Holder shall design all ~~inside~~-indoor spill containment areas or
37 secondary containment to hold at least 110 percent of the volume of liquids stored
38 within them.
39

40 D.6(9) The Certificate Holder shall design all outdoor spill containment areas ~~located~~
41 ~~outdoors~~ or secondary containment to hold at least 110 percent of the volume of liquids
42 stored within them, together with the volume of precipitation that might accumulate
43 during the 100-year return frequency storm.
44

1 Based on the analysis above, the Department recommends that Council find that compliance
2 with existing, recommended new and recommended amended conditions would minimize the
3 potential for accidental chemical spills or leaks and soil erosion to cause a significant adverse
4 impact to soils during construction and operation of the facility, with proposed changes.

5
6 **Conclusions of Law**

7 Based on the foregoing recommended findings of fact and conclusions of law, and subject to
8 compliance with existing, recommended new and amended site certificate conditions, the
9 Department recommends that the Council find that the facility, with proposed changes, would
10 continue to comply with the Council’s Soil Protection standard.

11
12 **III.E. Land Use: OAR 345-022-0030**

13
14 *(1) To issue a site certificate, the Council must find that the proposed facility complies*
15 *with the statewide planning goals adopted by the Land Conservation and Development*
16 *Commission.*

17
18 *(2) The Council shall find that a proposed facility complies with section (1) if:*

19
20 *(a) The applicant elects to obtain local land use approvals under ORS*
21 *469.504(1)(a) and the Council finds that the facility has received local land use*
22 *approval under the acknowledged comprehensive plan and land use regulations*
23 *of the affected local government; or*

24
25 *(b) The applicant elects to obtain a Council determination under ORS*
26 *469.504(1)(b) and the Council determines that:*

27
28 *(A) The proposed facility complies with applicable substantive criteria as*
29 *described in section (3) and the facility complies with any Land*
30 *Conservation and Development Commission administrative rules and*
31 *goals and any land use statutes directly applicable to the facility under*
32 *ORS 197.646(3);*

33
34 *(B) For a proposed facility that does not comply with one or more of the*
35 *applicable substantive criteria as described in section (3), the facility*
36 *otherwise complies with the statewide planning goals or an exception to*
37 *any applicable statewide planning goal is justified under section (4); or*

38
39 *(C) For a proposed facility that the Council decides, under sections (3) or*
40 *(6), to evaluate against the statewide planning goals, the proposed*
41 *facility complies with the applicable statewide planning goals or that an*
42 *exception to any applicable statewide planning goal is justified under*
43 *section (4).*

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

10 11 **Findings of Fact**

12 The Land Use standard requires the Council to find that the facility, with proposed changes,
13 would continue to comply with local applicable substantive criteria, as well as with any Land
14 Conservation and Development Commission administrative rules and goals and any land use
15 statutes directly applicable to the facility under ORS 197.646(3). The analysis area for potential
16 land use impacts, as defined in the project order, is the area within and extending ½-mile from
17 the site boundary.

18 19 Local Applicable Substantive Criteria

20 In its consideration of a site certificate amendment request, the Council applies the "applicable
21 substantive criteria," as described in the rule above, that are in effect on the date the certificate
22 holder submitted the amendment request.

23
24 In the *Final Order on the Application*, the Council found that facility was located entirely within
25 the Rural Industrial (RIPD) zone in Columbia County, and that the facility complied with
26 Columbia County's applicable substantive criteria for that zone.²³ The Council adopted
27 conditions in section D.4 of the site certificate to ensure compliance with the applicable
28 substantive criteria.

29
30 In the *Final Order on Amendment 7* and *Final Order on Amendment 10*, the Council found that
31 no applicable changes to Columbia County's substantive land use criteria had affected the
32 design, construction and operation of the reconfigured Unit 2 as proposed by the certificate
33 holder.²⁴

34
35 In Attachment 2 to *Request for Amendment 11*, the certificate holder provides and analysis of
36 applicable substantive criteria for the BESS. The list of applicable substantive criteria, shown in
37 ~~Table 1. Columbia County Applicable Substantive Criteria~~ Table 1, was developed by the
38 certificate holder with input from the County. Additionally, after reviewing the pRFA, the
39 Columbia County Planning Director provided a comment letter on the pRFA on July 11, 2019,
40 stating, "The Columbia County Planning Department has reviewed the above-mentioned
41 application and finds that it includes accurate findings of fact to all relevant sections of the

²³ *Final Order on the Application*, pp. 53-56.

²⁴ *Final Order on Amendment #7*, pp. 13-14.

1 Columbia County Zoning Ordinance and Columbia County Comprehensive Plan and we find no
2 additional local criteria, state statute, or state planning goals that need to be addressed.”

3

4 **Table 1. Columbia County Applicable Substantive Criteria**

Columbia County Zoning Ordinance (CCZO)
CCZO § 680 Resource Industrial – Planned Development
CCZO § 683 Uses Permitted Under Prescribed Conditions
CCZO § 685 Standards
CCZO § 1503 Conditional Uses
CCZO § 1100 Flood Hazard Overlay
CCZO § 1170 Riparian Corridors, Wetlands, Water Quality and Fish and Wildlife Habitat Overlay Zone
CCZO § 1173 Activities Prohibited within the Riparian Corridor Boundary
CCZO § 1175 Permitted Uses and Activities
CCZO § 1177 Permitted Uses and Activities
CCZO § 1180 Wetland Area Overlay
CCZO § 1190 Big Game Habitat Overlay
CCZO § 1400 Off-Street Parking and Loading
CCZO § 1450 Transportation Impact Analysis
CCZO § 1550 Site Design Review
CCZO § 1562 Landscaping: Buffering, Screening and Fencing
Columbia County Comprehensive Plan

5

6 **Columbia County Zoning Ordinance (CCZO)**

7

8 **CCZO § 680 Resource Industrial – Planned Development**

9

10 *CCZO § 681 Purpose:*

11

12 *The purpose of this district is to implement the policies of the Comprehensive Plan for*
13 *Rural Industrial Areas. These provisions are intended to accommodate rural and natural*
14 *resource related industries which:*

15

16 *.1 Are not generally labor intensive;*

17

18 In the *Final Order on the Application*, the Council found that the facility was not a labor-
19 intensive operation.²⁵ In Section 3.1 of Attachment 2 to *Request for Amendment 11*, certificate
20 holder proposes that the proposed BESS would not alter the basis for this finding because it
21 would not increase the number of employees at the proposed facility. Based on this

²⁵ Final Order on the Application, Attachment D, p. 4

1 representation, the Department agrees with the certificate holder and recommends Council
2 find that the changes proposed in *Request for Amendment 11* are consistent with this criterion.

3
4 *.2 Are land extensive;*

5
6 In the *Final Order on the ASC*, the Council found that the facility was a land-extensive use.²⁶ In
7 Section 3.1 of Attachment 2 to *Request for Amendment 11*, certificate holder proposes that the
8 proposed BESS would not alter the basis for this finding because it would be located within the
9 existing site boundary and would not remove land from the existing site. Because the proposed
10 BESS would be located inside the existing site boundary, the Department agrees with the
11 certificate holder and recommends Council find that the changes proposed in *Request for*
12 *Amendment 11* are consistent with this criterion.

13
14 *.3 Require a rural location in order to take advantage of adequate rail and/or vehicle*
15 *and/or deep water port and/or airstrip access;*

16
17 In the *Final Order on the ASC*, the Council found that the facility requires a rural location to take
18 advantage of rail and vehicle access, and to use the Columbia River and Bradbury Slough as a
19 water source.²⁷ In Section 3.1 of Attachment 2 to *Request for Amendment 11*, certificate holder
20 proposes that these findings apply to the proposed BESS because they are accessory and
21 supportive of the facility. In its letter dated July 11, 2019, the Columbia County Planning
22 department confirmed that Columbia County would treat the battery storage as a component
23 of the previously approved primary use.²⁸ Based on these comments, the Department agrees
24 with the certificate holder and County, and recommends Council find that the changes
25 proposed in *Request for Amendment 11* are consistent with this criterion.

26
27 *.4 Complement the character and development of the surrounding rural area;*

28
29 In the *Final Order on the Application*, the Council found that the facility compliments the
30 existing character and development of the Port Westward Industrial Park.²⁹ In Section 3.1 of
31 Attachment 2 to *Request for Amendment 11*, certificate holder explains that the proposed BESS
32 would not alter the basis for this finding because there will be no perceptible change to the
33 character and development of the surrounding area from the addition of the proposed BESS.
34 Because the components of the proposed BESS will be of a similar nature to the other
35 components of the Port Westward Generating Project, the Department agrees with the
36 certificate holder and County, and recommends Council find that the changes proposed in
37 *Request for Amendment 11* are consistent with this criterion.

38

²⁶ Ibid.

²⁷ Ibid.

²⁸ Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B.

²⁹ Ibid.

1 *.5 Are consistent with the rural facilities and services existing and/or planned for the*
2 *area; and,*

3
4 In the *Final Order on the Application*, the Council found that the facility use is consistent with
5 existing or planned facilities and services.³⁰ In Section 3.1 of Attachment 2 to *Request for*
6 *Amendment 11*, certificate holder proposes that these findings apply to the proposed BESS
7 because BESS would be an accessory use to the Facility. Certificate holder further explains that
8 the BESS will include ~~fire~~fire alarms and suppression systems that will comply with applicable
9 standards specified by the Columbia County building department through the permitting
10 process, that the facility will not increase the need for public facilities or services in the area.
11 Staff agrees with the certificate holder and, as discussed in section III.M. Public Services: OAR
12 345-022-0110~~III.M. Public Services: OAR 345-022-0110~~, expects no significant impacts on public
13 services as a result of the construction and operation of the proposed BESS. Based on this
14 analysis, the Department recommends Council find that the changes proposed in *Request for*
15 *Amendment 11* are consistent with this criterion.

16
17 *.6 Will not require facility and/or service improvements at significant public expense.*

18
19 In the *Final Order on the Application*, the Council found that the facility would rely upon existing
20 or new on-site facilities and services and would not impose significant expense on the public.³¹
21 In Section 3.1 of Attachment 2 to *Request for Amendment 11*, certificate holder proposes that
22 these findings apply to the proposed BESS because BESS would be an accessory use to the
23 Facility, and that the facility will not increase the need for public facilities or services in the
24 area. The Department agrees with the certificate holder and, as discussed in section III.M.
25 Public Services: OAR 345-022-0110~~III.M. Public Services: OAR 345-022-0110~~, expects no
26 significant impacts on public services as a result of the construction and operation of the
27 proposed BESS. Based on this analysis, recommends Council find that the changes proposed in
28 *Request for Amendment 11* are consistent with this criterion.

29
30 **CCZO § 683 Uses Permitted Under Prescribed Conditions**

31
32 *The following uses may be permitted subject to the conditions imposed for each use:*

33
34 *.1 Production, processing, assembling, packaging, or treatment of materials; research*
35 *and development laboratories; and storage and distribution of services and facilities*
36 *subject to the following findings:*

37
38 *A. The requested use conforms with the goals and policies of the Comprehensive*
39 *Plan - specifically those policies regarding rural industrial development and*
40 *exceptions to the rural resource land goals and policies.*

41

³⁰ Ibid., p. 5

³¹ Ibid.

1 *B. The potential impact upon the area resulting from the proposed use has been*
2 *addressed and any adverse impact will be able to be mitigated considering the*
3 *following factors:*

4
5 *.1 Physiological characteristics of the site (ie., topography, drainage, etc.)*
6 *and the suitability of the site for the particular land use and*
7 *improvements;*

8
9 *.2 Existing land uses and both private and public facilities and services in*
10 *the area;*

11
12 *.3 The demonstrated need for the proposed use is best met at the*
13 *requested site considering all factors of the rural industrial element of the*
14 *Comprehensive Plan.*

15
16 *C. The requested use can be shown to comply with the following standards for*
17 *available services:*

18
19 *.1 Water shall be provided by an on-site source of sufficient capacity to*
20 *serve the proposed use, or a public or community water system capable of*
21 *servicing the proposed use.*

22
23 *.2 Sewage will be treated by a subsurface sewage system, or a community*
24 *or public sewer system, approved by the County Sanitarian and/or the*
25 *State DEQ.*

26
27 *.3 Access will be provided to a public right-of-way constructed to*
28 *standards capable of supporting the proposed use considering the*
29 *existing level of service and the impacts caused by the planned*
30 *development.*

31
32 *.4 The property is within, and is capable of being served by, a rural fire*
33 *district; or, the proponents will provide on-site fire suppression facilities*
34 *capable of servicing the proposed use. On-site facilities shall be approved*
35 *by either the State or local Fire Marshall.*

36
37 In the *Final Order on the Application*, the Council found that the facility was a use permitted
38 under CCZO § 683 because it is a use that involves the production of electricity through the
39 processing of a material (natural gas) as well as the distribution of that electricity as a service.³²
40 The Council found that the requested use conforms with the goals and policies of the
41 Comprehensive Plan regarding rural industrial development and exceptions to the rural
42 resource land goals and policies. In particular, the Council found that the use was consistent

³² Ibid., p. 11

1 with the Port Westward Exception Statement, which designates the Port Westward Industrial
2 Park for industrial use due to its historic use for industrial purposes and its suitability for future
3 industrial use.³³
4

5 In Section 3.1.1 of Attachment 2 to *Request for Amendment 11*, certificate holder proposes that
6 these findings apply to the proposed BESS because the BESS will be “integral to the storage and
7 distribution of electricity produced at the facility,” and is subject to the same geographic and
8 logistical considerations. In addition, the certificate holder proposes that because there would
9 be no change to demand for public services as a result of the addition of the proposed BESS,
10 the proposed changes would not alter the basis for the findings that the facility meets the
11 conditions under CCZO § 683.1.C. In its letter dated July 11, 2019, the Columbia County
12 Planning department confirmed that Columbia County would treat the battery storage as a
13 component of the previously approved primary use.³⁴ The Department agrees that the BESS
14 should be treated as a component of the previously approved use, and that the Council’s
15 previous findings for the facility are applicable to the proposed BESS. Based on this analysis, the
16 Department agrees with the certificate holder and recommends Council find that the changes
17 proposed in *Request for Amendment 11* are consistent with this criterion.
18

19 *.2 Accessory buildings may be allowed if they fulfill the following requirements:*
20

21 *A. If attached to the main building or separated by a breezeway, they shall meet*
22 *the front and side yard requirements of the main building.*
23

24 *B. If detached from the main building, they must be located behind the main*
25 *building or a minimum of 50 feet from the front lot or parcel line, whichever is*
26 *greater.*
27

28 *C. Detached accessory buildings shall have a minimum setback of 50 feet from*
29 *the rear and/or side lot or parcel line.*
30

31 As discussed in the section above, the certificate holder proposes that because the proposed
32 BESS will be “integral to the storage and distribution of electricity produced at the facility,” the
33 proposed BESS should be evaluated as a use described under CCZO § 683.1, and that the
34 Council’s findings for the facility under that section should apply to the proposed BESS.
35 Columbia County has confirmed in its July 11, 2019 comment letter to the Department that it
36 would treat the battery storage as a component of the previously approved primary use.³⁵
37

38 In Section 3.1.1 of Attachment 2 to *Request for Amendment 11*, the certificate holder proposes
39 that because the proposed BESS would support the facility, it would not be an accessory

³³ Final Order on the Application, Attachment D, p. 7.

³⁴ Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B.

³⁵ Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B.

1 building, but even if it was, it would meet the conditions of CCZO § 683.2 because it would be
2 detached from the main building and located a minimum of 50 feet from any parcel lines.

3
4 The Department agrees with the certificate holder and the County that the proposed BESS
5 should be treated as a component of the previously approved primary use, recommends that
6 CCZO § 683.2 does not apply to the changes proposed in *Request for Amendment 11*.

7
8 *.3 Signs as provided in Chapter 1300.*

9
10 In Section 3.1.1 of Attachment 2 to *Request for Amendment 11*, The certificate holder proposes
11 that this section does not apply because the proposed BESS would not involve additional
12 signage at the facility. Based on this representation, the Department agrees with the certificate
13 holder and recommends that this criterion does not apply to changes proposed in *Request for*
14 *Amendment 11*.

15
16 *.4 Off street parking and loading as provided in Chapter 1400.*

17
18 The certificate holder proposes that this section does not apply because the proposed BESS
19 would not increase the number of employees at the facility and therefore would not affect
20 parking or loading needs at the Facility. Based on this representation, the Department agrees
21 with the certificate holder and recommends that this criterion does not apply to changes
22 proposed in *Request for Amendment 11*.

23
24 **CCZO § 685 Standards**

25
26 *.2 The minimum lot or parcel size, average lot or parcel width and depth, and setbacks for*
27 *uses allowed under Section 683, shall be established by the Planning Commission and will be*
28 *sufficient to support the requested rural industrial use considering, at a minimum the*
29 *following factors:*

30
31 *A. Overall scope of the project. Should the project be proposed to be developed in*
32 *phases, all phases shall be considered when establishing the minimum lot size.*

33
34 *B. Space required for off-street parking and loading and open space, as required.*

35
36 *C. Setbacks necessary to adequately protect adjacent properties.*

37
38 In the Final Order on the Application, the Council found that “the 19-acre site provides
39 adequate space for all site improvements and incorporates setbacks from any potential
40 surrounding uses.”³⁶ In Section 3.1.2 of Attachment 2 to *Request for Amendment 11*, the
41 certificate holder proposes that these findings apply to the proposed BESS because the
42 proposed BESS would be within the existing fence line of the Facility and would be set farther

³⁶ Final Order on the Application, Attachment D, p. 11

1 back from the lot lines than existing Facility building and structures, and that temporary uses to
2 construct the facility will be at sites previously approved in the site certificate. Because the
3 proposed BESS would be located inside the existing site boundary, as described above, and
4 temporary impacts would be limited to areas previously approved for use, the Department
5 agrees with the certificate holder and recommends Council find that the changes proposed in
6 *Request for Amendment 11* are consistent with this criterion.

7
8 *.3 Access shall be provided to a public right-of-way of sufficient construction to support the*
9 *intended use, as determined by the County Roadmaster.*

10
11 In the Final Order on the Application the Council found that the certificate holder and Columbia
12 County had “identified the improvements and mitigation measures needed to address
13 transportation-related impacts during construction.” In Section 3.1.2 of Attachment 2 to
14 *Request for Amendment 11*, the Certificate Holder explains that the addition of the proposed
15 BESS will not require changes to access to the facility, and as a result, do not alter the Council’s
16 prior findings with respect to the availability or adequacy of access to a public right-of-way.
17 Based on this representation, the Department agrees with the certificate holder and
18 recommends that this criterion does not apply to changes proposed in *Request for Amendment*
19 *11*.

20
21 **CCZO § 1503 Conditional Uses**

22
23 *1503.5 Granting a Permit: The Commission may grant a Conditional Use Permit after*
24 *conducting a public hearing, provided the applicant provides evidence substantiating that all*
25 *the requirements of this ordinance relative to the proposed use are satisfied and*
26 *demonstrates the proposed use also satisfies the following criteria:*

27
28 *A. The use is listed as a Conditional Use in the zone which is currently applied to the site;*

29
30 *B. The use meets the specific criteria established in the underlying zone;*

31
32 *C. The characteristics of the site are suitable for the proposed use considering size,*
33 *shape, location, topography, existence of improvements, and natural features;*

34
35 *D. The site and proposed development is timely, considering the adequacy of*
36 *transportation systems, public facilities, and services existing or planned for the area*
37 *affected by the use;*

38
39 *E. The proposed use will not alter the character of the surrounding area in a manner*
40 *which substantially limits, impairs, or precludes the use of surrounding properties for the*
41 *primary uses listed in the underlying district;*

1 *F. The proposal satisfies the goals and policies of the Comprehensive Plan, which apply*
2 *to the proposed use;*

3
4 *G. The proposal will not create any hazardous conditions.*
5

6 In the Final Order on the Application, the Council found that the certificate holder
7 demonstrated that the facility satisfied the criteria of CCZO § 1503.5 for the Rural Industrial
8 Zone. In section 3.3.1 of Attachment 2 to *Request for Amendment 11*, the certificate holder
9 explains that because the BESS is an accessory use and related and supporting facility to the
10 approved and operational Facility, the Council’s findings that the facility satisfied the criteria of
11 CCZO § 1503.5 apply to the proposed BESS. In addition, the certificate holder proposes that the
12 proposed BESS will not create additional impacts to areas that were not previously approved
13 for use, natural features, access, or public services, the proposed BESS, in compliance with the
14 existing and new conditions imposed in this Order, will not alter the basis for these previous
15 findings. Columbia County has confirmed in its July 11, 2019 comment letter to the Department
16 that it would treat the battery storage as a component of the previously approved primary
17 use.³⁷ The Department agrees with the certificate holder and the County that the proposed
18 BESS should be treated as a component of the previously approved primary use, and
19 recommends the Council find the changes proposed in *Request for Amendment 11* continue to
20 satisfy the criteria in CCZO § 1503.5.
21

22 **CCZO § 1100 Flood Hazard Overlay**

23 *A. Flood Hazard Areas: See CCZO § 1100, Flood Hazard Overlay Zone. All development in Flood*
24 *Hazard Areas must comply with State and Federal Guidelines.*
25

26 In section 3.2.1 of Attachment 2 to Request for Amendment 1, the certificate holder explains
27 that the changes proposed in this amendment request will be located outside flood hazard
28 areas. On May 13, 2019, the Department accessed the National Flood Hazard Layer Viewer³⁸
29 and confirmed that, with the levee re-alignment completed prior to construction of Unit 1, the
30 facility is located outside of Flood Hazard Overlay Zone. Based on this analysis, the Department
31 recommends the Council find that the changes proposed in *Request for Amendment 11* are
32 consistent with CCZO § 1100 because the development will not occur in a Flood Hazard Area.
33

34 **CCZO § 1170 Riparian Corridors, Wetlands, Water Quality and Fish and Wildlife Habitat**
35 **Overlay Zone**

36
37 **1172 Riparian Corridor Standards:**

38
39 *A. The inventory of Columbia County streams contained in the Oregon Department of*
40 *Forestry Stream Classification Maps specifies which streams and lakes are fish-bearing. Fish-*
41 *bearing lakes are identified on the map entitled, “Lakes of Columbia County.” A copy of the*
42 *most current Stream Classification Maps is attached to the Comprehensive Plan, Technical*

³⁷ Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B.

³⁸ Available at <https://www.fema.gov/national-flood-hazard-layer-nfhl>. Accessed May 13, 2019.

1 *Appendix Part XVI, Article X(B) for reference. Based upon the stream and lake inventories, the*
2 *following riparian corridor boundaries shall be established:*

3
4 *1. Lakes. Along all fish-bearing lakes, the riparian corridor boundary shall be 50-feet*
5 *from the top-of-bank, except as provided in CCZO Section 1 172(A)(5), below.*

6
7 *2. Fish-Bearing Streams, Rivers and Sloughs (Less than 1000 cfs). Along all fish-bearing*
8 *streams, rivers, and sloughs with an average annual stream flow of less than 1,000 cubic*
9 *feet per second (cfs), the riparian corridor boundary shall be 50-feet from the top-of-*
10 *bank, except as provided in CCZO Section 1172(A)(5), below. Average annual stream flow*
11 *information shall be provided by the Oregon Water Resources Department.*

12
13 *3. Fish-Bearing and Non-Fish-Bearing Streams, Rivers and Sloughs (Greater than 1000*
14 *cfs). Along all streams, rivers, and sloughs with an average annual stream flow greater*
15 *than 1,000 cubic feet per second (cfs), the riparian corridor boundary shall be 75-feet*
16 *upland from the top-of bank, except as provided in CCZO Section 1172(A)(5), below.*
17 *Average annual stream flow information shall be provided by the Oregon Water*
18 *Resources Department.*

19
20 *4. Other rivers, lakes, streams, and sloughs. Along all other rivers, streams, and sloughs,*
21 *the riparian corridor boundary shall be 25 feet upland from the top-of-bank, except as*
22 *provided in CCZO Section 1172(A)(5), below.*

23
24 *5. Wetlands. Where the riparian corridor includes all or portions of a significant wetland,*
25 *as identified in the State Wetlands Inventory and Local Wetlands Inventories, the*
26 *standard distance to the riparian corridor boundary shall be measured from, and include,*
27 *the upland edge of the wetland. Significant wetlands are also regulated under provisions*
28 *in the Wetland Overlay Zone, Columbia County Zoning Ordinance, Section 1180.*

29
30 *B. Distance Measurement.*

31
32 *1. Except as provided in Subsection 1172(5) above, the measurement of distance to the*
33 *riparian corridor boundary shall be from the top-of-bank. In areas where the top-of bank*
34 *is not clearly delineated, the riparian corridor boundary shall be measured from the*
35 *ordinary high water level, or the line of non-aquatic vegetation, whichever is most*
36 *landward. * * **

37
38 In its Final Order on Request for Amendment 2, the Council amended Site Certificate Condition
39 D.8(12) to require the facility to comply with the requirements of the then newly adopted CCZO
40 § 1172. In section 3.4.1 of Attachment 2 to *Request for Amendment 11*, the certificate holder
41 explains that like other components of the energy facility, the proposed BESS would be located
42 more than 75 feet from the top of banks of the Columbia River and the Bradbury Slough. The
43 certificate holder also notes that CCZO §§1173, 1175, and 1177 do not apply to the proposed
44 BESS because it would be located outside of the riparian corridor. The department agrees, and

1 recommends that, subject to compliance with Site Certificate Condition D.8(12), the changes
2 proposed in *Request for Amendment 11* are consistent with CCZO § 1170.

3
4 **CCZO § 1180 Wetland Area Overlay**

5
6 **CCZO § 1181 Purpose:**

7 *The purpose of this zone is to protect significant wetland within the identified Wetland Areas as*
8 *shown on the State Wetland Inventory and Local Wetland Inventories, from filling, drainage, or*
9 *other alteration which would destroy or reduce their biological value. The Wetland Area Overlay*
10 *does not apply to land legally used for commercial forestry operations or standard farm*
11 *practices, both of which are exempt from these wetland area corridor standards. The use of land*
12 *for commercial forestry is regulated by the Oregon Department of Forestry. The use of land for*
13 *standard farm practices is regulated by the Oregon Department of Agriculture, with riparian*
14 *area and water quality issues governed by ORS 568.210 to ORS 568.805.*

15
16 In section 3.4.5 of Attachment 2 to *Request for Amendment 11* the certificate holder explains
17 that CCZO § 1181 does not apply to the proposed BESS because it would be located in a
18 developed area with impervious surface; where no wetlands are present. The certificate holder
19 explains that surveys also concluded that there are no wetlands or waterways located within
20 the spoils disposal area. The certificate holder provided an updated wetland delineation report
21 as Attachment 6 to the *Request for Amendment 11*. The study confirms the certificate holder's
22 representation. A 3.09 acre palustrine emergent wetland adjacent the spoils disposal area was
23 identified in the report; however, as discussed in Section ~~III.Q.2. Removal-Fill~~~~III.Q.2. Removal-~~
24 ~~Fill~~, existing Site Certificate Conditions are in-place to avoid impacts if spoils are generated and
25 disposed of during construction of the proposed BESS. Based on the analysis above, and subject
26 to compliance with existing site certificate conditions in section E.1.b of the site certificate, the
27 department agrees with the certificate holder, and recommends that the changes proposed in
28 *Request for Amendment 11* are consistent with CCZO § 1181.

29
30 **CCZO § 1190 Big Game Habitat Overlay**

31
32 **CCZO § 1191 Purpose:**

33
34 *To protect sensitive habitat areas for the Columbian White-tailed Deer and other Big Game by*
35 *limiting uses and development activities that conflict with maintenance of the areas. This*
36 *section shall apply to all areas identified in the Comprehensive Plan as a Major and Peripheral*
37 *Big Game Range or Columbian White-tailed deer range, as shown on the 1995 Beak*
38 *Consultant's Map, entitled "Wildlife Game Habitat" in the Comprehensive Plan in Appendix Part*
39 *XVI, Article VIII(A).*

40
41 In section 3.4.6 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
42 that this standard does not apply to the proposed changes because they are not in the Big
43 Game Habitat Overlay. The Department agrees that the Port Westward Industrial Park,
44 including the proposed site of the BESS, is not identified as a Major and Peripheral Big Game

1 Range or Columbian White-tailed deer range on the 1995 Beak Consultant’s Map, entitled
2 “Wildlife Game Habitat” in the Comprehensive Plan in Appendix Part XVI, Article VIII(A)³⁹, likely
3 due to its impacted status as Rural Industrial zoned land. Based on this analysis, the
4 Department agrees with the certificate holder that CCZO § 1190 does not apply to the changes
5 proposed in *Request for Amendment 11*.

6
7 **CCZO§ 1450 Transportation Impact Analysis**

8 *Transportation Impact Analysis: A Transportation Impact Analysis (TIA) must be submitted with*
9 *a land use application at the request of the Public Works Director or if the proposal is expected*
10 *to involve one or more of the conditions in 1450.1 (below) in order to minimize impacts on and*
11 *protect transportation facilities, consistent with Section 660-012-0045(2)(b) and (e) of the State*
12 *Transportation Planning Rule.*

13
14 *1450.1 Applicability – A TIA shall be required to be submitted to the County with a land use*
15 *application at the request of the Roads Department Director or if the proposal is expected to*
16 *involve one (1) or more of the following:*

17
18 *A. Changes in land use designation, or zoning designation that will generate more vehicle trip*
19 *ends.*

20
21 *B. Projected increase in trip generation of 25 or more trips during either the AM or PM peak*
22 *hour, or more than 400 daily trips.*

23
24 *C. Potential impacts to intersection operations.*

25
26 *D. Potential impacts to residential areas or local roadways, including any non-residential*
27 *development that will generate traffic through a residential zone.*

28
29 *E. Potential impacts to pedestrian and bicycle routes, including, but not limited to school*
30 *routes and multimodal roadway improvements identified in the TSP.*

31
32 *F. The location of an existing or proposed access driveway does not meet minimum spacing*
33 *or sight distance requirements, or is located where vehicles entering or leaving the property*
34 *are restricted, or such vehicles are likely to queue or hesitate at an approach or access*
35 *connection, thereby creating a safety hazard.*

36
37 *G. A change in internal traffic patterns may cause safety concerns.*

38
39 *H. A TIA is required by ODOT pursuant with OAR 734-051.*
40

³⁹ Available at:
https://www.co.columbia.or.us/files/lds/planning/Wildlife%20and%20Sensitive%20Lands%20Maps/Clatskanie_Wildlife.pdf. Accessed August 29, 2019.

1 *I. Projected increase of five trips by vehicles exceeding 26,000-pound gross vehicle weight (13*
2 *tons) per day, or an increase in use of adjacent roadways by vehicles exceeding 26,000-pound*
3 *gross vehicle weight (13 tons) by 10 percent.*

4
5 In Section 3.2.3 of Attachment 2 to *Request for Amendment 11*, the certificate holder proposes
6 that the changes described in the request will not require a Transportation Impact Analysis
7 because there will be no changes to zoning or land use at the Facility; there will not be any
8 changes to access, intersections, or road improvements needed, and there will be no
9 permanent increase in traffic. The certificate holder explains that there will be a small,
10 temporary increase in traffic during the construction of the proposed BESS; however no impacts
11 to the local or state road network, including multimodal routes or adjacent land uses are
12 anticipated. Because the estimated number of trips generated by construction and operation of
13 the proposed BESS are less than those that would require a Transportation Impact Analysis, and
14 as discussed in Section ~~III.M.6 Traffic Safety~~~~III.M.6 Traffic Safety~~, no impacts to traffic safety are
15 expected, the Department agrees with the certificate holder, and recommends that the Council
16 finds the changes proposed in *Request for Amendment 11* do not require a Transportation
17 Impact Analysis.

18
19 **CCZO § 1550 Site Design Review**

20 *The Site Design Review process shall apply to all new development, redevelopment,*
21 *expansion, or improvement of all community, governmental, institutional, commercial,*
22 *industrial and multi-family residential (4 or more units) uses in the County.*

23
24 In Section 3.4.7 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
25 that it will construct the facility in compliance with the standards set forth in CCZO § 1562, as
26 discussed below. The certificate holder further explains that it will submit a site plan to
27 Columbia County as part of its building permit application consistent with Site Certificate
28 Condition D.4(2). The Department agrees that the site design process applies, and
29 ~~R~~ recommends that the Council find that the changes proposed in *Request for Amendment 11*,
30 subject to compliance with the new Site Certificate Condition D.4(2), are consistent with the
31 requirements of CCZO §1550.

32
33 **CCZO § 1562 Landscaping: Buffering, Screening and Fencing**

34
35 **CCZO § 1562 A. General Provisions:**

36
37 *1. Existing plant materials on a site shall be protected to prevent erosion. Existing trees and*
38 *shrubs may be used to meet landscaping requirements if no cutting or filling takes place*
39 *within the dripline of the trees or shrubs.*

40
41 *2. All wooded areas, significant clumps or groves of trees, and specimen conifers, oaks or*
42 *other large deciduous trees, shall be preserved or replaced by new plantings of similar size or*
43 *character*

1 In Section 3.4.8 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
2 that the proposed BESS will be sited on areas that are currently paved. Certificate holder adds
3 that the spoils disposal area may be cleared of some vegetation prior to use but will be
4 revegetated after construction activities have been completed, in compliance with the
5 Revegetation and Noxious Weed Control Plan and existing Site Certificate Conditions related to
6 Fish and Wildlife and Soil Protection. The department agrees, and subject to compliance with
7 the existing, amended, and new conditions in sections D.6 and D.8 of the site certificate,
8 recommends the Council find the changes proposed in *Request for Amendment 11* are
9 consistent with this criterion.

10
11 CCZO § 1562 B. Buffering Requirements

12
13 *1. Buffering and/or screening are required to reduce the impacts on adjacent uses which are*
14 *of a different type. When different uses are separated by a right of way, buffering, but not*
15 *screening, may be required.*

16
17 In Section 3.4.8 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
18 that the buffering requirements do not apply because the facility is surrounded by parcels with
19 the same zoning (RIPD) and that the adjacent uses are of a similar industrial nature and would
20 not be adversely affected by the addition of BESS to the Facility. Certificate holder adds that
21 the screening requirements are not applicable in the absence of differing uses and because
22 proposed changes will not materially alter the visual setting of the Facility. The Department
23 agrees with the certificate holder and recommends that this criterion is not applicable to the
24 changes proposed in *Request for Amendment 11*.

25
26 CCZO § 1562 D. Fences and Walls

27
28 *1. Fences, walls or combinations of earthen berms and fences or walls up to four feet in*
29 *height may be constructed within a required front yard. Rear and -265- DR side yard fences,*
30 *or berm/fence combinations behind the required front yard setback may be up to six feet in*
31 *height.*

32
33 *2. The prescribed heights of required fences, walls, or landscaping shall be measured from*
34 *the lowest of the adjoining levels of finished grade.*

35
36 *3. Fences and walls shall be constructed of any materials commonly used in the construction*
37 *of fences and walls such as wood, brick, or other materials approved by the Director.*
38 *Corrugated metal is not an acceptable fencing material. Chain link fences with slats may be*
39 *used if combined with a continuous evergreen hedge.*

40
41 *4. Re-vegetation: Where natural vegetation or topsoil has been removed in areas not*
42 *occupied by structures or landscaping, such areas shall be replanted to prevent erosion.*

43
44 In Section 3.4.8 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains

1 that the proposed changes do not include any new external fences or changes to existing and
2 approved external site fences. The Department notes that construction of the proposed BESS
3 could result in realignment of internal fences for the existing switchyard, but because no new
4 external fences would be constructed, recommends that this criterion does not apply to the
5 changes proposed in *Request for Amendment 11*.

6
7 **CCZO § 1563 Standards for Approval**

8
9 *A. Flood Hazard Areas: See CCZO § 1100, Flood Hazard Overlay Zone. All development in*
10 *Flood Hazard Areas must comply with State and Federal Guidelines.*

11
12 On May 13, 2019, the Department accessed the National Flood Hazard Layer Viewer⁴⁰ and
13 confirmed that, with the levee re-alignment completed prior to construction of Unit 1, the
14 facility is located outside of Flood Hazard Overlay Zone. Based on this analysis, the Department
15 recommends the Council find that the changes proposed in *Request for Amendment 11* are
16 consistent with CCZO § 1100 because the development will not occur in a Flood Hazard Area.

17
18 *B. Wetlands and Riparian Areas: Alteration of wetlands and riparian areas shall be in*
19 *compliance with State and Federal laws.*

20
21 The certificate holder provided an updated wetland delineation report as Attachment 6 to the
22 *Request for Amendment 11*. The study confirms that there are no wetlands or riparian areas
23 within areas of permanent or temporary disturbance. A 3.09 acre palustrine emergent
24 wetland adjacent the spoils disposal area was identified in the report; however, as discussed in
25 Section ~~III.Q.2. Removal-Fill~~~~III.Q.2. Removal-Fill~~, existing Site Certificate Conditions are in-place
26 to avoid impacts if spoils are generated and disposed of during construction of the proposed
27 BESS. Based on the analysis above, and subject to compliance with existing site certificate
28 conditions in section E.1.b of the site certificate, the department agrees with the certificate
29 holder, and recommends that the Council find the changes proposed in *Request for*
30 *Amendment 11* are consistent with this standard.

31
32 *C. Natural Areas and Features: To the greatest practical extent possible, natural areas and*
33 *features of the site shall be preserved*

34
35 In Section 3.4.9 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
36 that the proposed BESS would be constructed entirely within the fence line of the Facility, on
37 previously developed impervious surface and will not change the developed footprint of the
38 Facility. Because the proposed BESS would be located inside the existing site boundary, as
39 described above, and temporary impacts would be limited to areas previously approved for
40 use, the Department agrees with the certificate holder and recommends Council find that the
41 changes proposed in *Request for Amendment 11* are consistent with this criterion.

⁴⁰ Available at <https://www.fema.gov/national-flood-hazard-layer-nfh/>. Accessed May 13, 2019.

1
2 *D. Historic and Cultural sites and structures: All historic and culturally significant sites*
3 *and structures identified in the Comprehensive Plan, or identified for inclusion in the*
4 *County Periodic Review, shall be protected if they still exist.*
5

6 In Section 3.4.9 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
7 the proposed changes would not affect any historic resources identified because the proposed
8 changes would all be within the existing fence line or in areas previously used and approved for
9 use by the Facility. The Council previously found that no areas of temporary or permanent
10 disturbance are included in the Columbia County Comprehensive Plan as a historically or
11 culturally significant site.⁴¹ Based on this prior finding, the Department recommends that the
12 Council find that the changes proposed in *Request for Amendment 11* comply with this
13 standard.
14

15 *E. Lighting: All outdoor lights will be shielded so as not to shine directly on adjacent*
16 *properties and roads.*
17

18 In Section 3.4.9 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
19 there will be no change to outdoor lighting as part of the changes proposed in *Request for*
20 *Amendment 11*. Based on this representation, the Department recommends the Council find
21 this standard does not apply to the changes proposed in *Request for Amendment 11*.
22

23 *F. Energy Conservation: Buildings should be oriented to take advantage of natural*
24 *energy saving elements such as the sun, landscaping and landforms.*
25

26 In Section 3.4.9 of Attachment 2 to *Request for Amendment 11*, the certificate holder proposes
27 that the proposed BESS would be consistent with the energy conservation standard because it
28 would support the efficiency of the energy system. The Department disagrees with this
29 reasoning because the existing energy system is not a natural energy saving element. However,
30 because the proposed BESS would be a component of the previously approved primary use,
31 which itself is located near the Columbia River to conserve energy and resources needed to
32 produce electricity, and the BESS would further support the efficiency of energy production at
33 the facility, the Department recommends the Council find that the changes proposed in
34 *Request for Amendment 11* comply with this standard.
35

36 *G. Transportation Facilities: Off-site auto and pedestrian facilities may be required by the*
37 *Planning Commission, Planning Director or Public Works Director consistent with the*
38 *Columbia County Road Standards and the Columbia County Transportation Systems*
39 *Plan.*
40

⁴¹ Final Order on the Application, Attachment D p. 28. Also see Section [III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090](#)~~III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090~~

1 In Section 3.4.9 of Attachment 2 to *Request for Amendment 11*, the certificate holder explains
2 that because BESS will not require any additional permanent employees there will be no need
3 for any offsite auto or pedestrian facilities. The Department agrees with the certificate holder
4 and recommends the Council find the changes proposed in *Request for Amendment 11* comply
5 with this standard.

6
7 **Columbia County Comprehensive Plan**

8 In section 4 of Attachment 2 to *Request for Amendment 11*, the certificate holder proposes that
9 the changes described in *Request for Amendment 11* are consistent with the overall planning
10 goals adopted by the county in the county Comprehensive Plan. In accordance with ORS
11 469.504(5), the Department requested the Special Advisory Group confirm the list of the
12 applicable substantive criteria identified by the certificate holder in Attachment 2 to the
13 *Request for Amendment 11* was complete. The Columbia County Planning Department
14 confirmed that it had reviewed the preliminary *Request for Amendment 11*, and found that it
15 includes accurate findings of fact to all relevant sections of the Columbia County Zoning
16 Ordinance and the Columbia County Comprehensive Plan found no additional local criteria,
17 state statute, or state planning goals that need to be addressed.⁴²

18
19 In accordance with Columbia County's comments, and the findings presented in this order
20 related to compliance with the applicable substantive criteria, the Department recommends
21 that the requested amendment components are consistent with the goals and policies of the
22 Columbia County Comprehensive Plan, particularly the sections related to Economy, Industrial
23 Development, Resource Industrial Development, Public Facilities and Services and Open Space,
24 Scenic and Historic Areas, as implemented by the Columbia County Zoning Ordinances
25 described in this order.⁴³

26
27 **Conclusions of law**

28 Based on the foregoing findings of fact, the Department **Re**commends the Council find that the
29 facility, with the proposed changes, continues to comply with the Council's Land Use Standard.

30
31 **III.F. Protected Areas: OAR 345-022-0040**

32
33 *(1) Except as provided in sections (2) and (3), the Council shall not issue a site certificate*
34 *for a proposed facility located in the areas listed below. To issue a site certificate for a*
35 *proposed facility located outside the areas listed below, the Council must find that,*
36 *taking into account mitigation, the design, construction and operation of the facility are*
37 *not likely to result in significant adverse impact to the areas listed below. References in*
38 *this rule to protected areas designated under federal or state statutes or regulations are*
39 *to the designations in effect as of May 11, 2007:*

⁴² Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B to this **DPQ**Order.

⁴³ Rather than make findings on the broad policies and goals articulated in the Comprehensive plan that are not specific to locations, activity or use, in this Order the Department recommends the Council make findings on compliance with the land use regulations that implement the relevant sections of the Comprehensive Plan. See ORS 197.175(2) and 197.015(11).

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

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

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

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

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

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

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

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

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

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

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

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

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

13
14 *(n) Research forests established by the College of Forestry, Oregon State University,*
15 *including but not limited to McDonald Forest, Paul M. Dunn Forest, the Blodgett Tract in*
16 *Columbia County, the Spaulding Tract in the Mary's Peak area and the Marchel Tract;*

17
18 *(o) Bureau of Land Management areas of critical environmental concern, outstanding*
19 *natural areas and research natural areas;*

20
21 *(p) State wildlife areas and management areas identified in OAR chapter 635, Division 8.*
22 *****

23 *(3) The provisions of section (1) do not apply to transmission lines or natural gas*
24 *pipelines routed within 500 feet of an existing utility right-of-way containing at least one*
25 *transmission line with a voltage rating of 115 kilovolts or higher or containing at least*
26 *one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of*
27 *125 psig.*

28
29 **Findings of Fact**

30 The Protected Areas Standard requires the Council to find that, taking into account mitigation,
31 the design, construction, and operation of a proposed facility, or facility with proposed changes,
32 are not likely to result in significant adverse impacts to any protected area, as defined by OAR
33 345-022-0040. Impacts to protected areas are evaluated based on identification of protected
34 areas, pursuant to OAR 345-022-0040, within the analysis area and an evaluation of the
35 following potential impacts during facility construction and operation: excessive noise,
36 increased traffic, water use, wastewater disposal, visual impacts of facility structures or plumes,
37 and visual impacts from air emissions. In accordance with OAR 345-001-0010(59)(e), the
38 analysis area for protected areas is the area within and extending 20 miles from the project site
39 boundary and spoils disposal area.

1 ~~Table 1~~~~Table 2~~~~Table 2~~, lists the protected areas within the analysis area identified in *Request for*
 2 *Amendment 11*.⁴⁴ No protected areas that have not been evaluated in previous ~~Order~~s were
 3 identified.

4
 5 **Table 2. Protected Areas within facility Analysis Area and 20 miles from Site Boundary.**

Protected Area	Distance and Direction from Site Boundary
Abernathy Fish Technology Center	3.5 miles, NNE
Beaver Creek Hatchery	8.2 miles, WNW
Big Creek Hatchery	19.7 miles, W
Bradley State Scenic Viewpoint	12.6 miles, W
Fallert Creek Hatchery	19.9, miles, ES
Gnat Creek Hatchery	15.1 miles, W
Julia Butler Hansen Refuge 1	12.2, miles, WNW
Julia Butler Hansen Refuge 2	0.5 miles, NE
Julia Butler Hansen Refuge 3	4.1 miles, S
Julia Butler Hansen Refuge 4	3.6 miles, SW
Julia Butler Hansen Refuge 5	8.8 miles, WSW
Julia Butler Hansen Refuge 6	12.9 miles, WNW
Lewis and Clark National Wildlife Refuge	15.2 miles, WNW
OSU Research Forest Blodgett Tract	9.5 miles, SW

6
 7 Potential adverse impacts to the protected areas shown in ~~Table 2~~~~Table 2~~ during construction
 8 and operation of the BESS could include noise, traffic, water use and wastewater disposal, and
 9 visual impacts.

10
 11 In the *Final Order on the Application*, the Council found that the design, construction and
 12 operation of the facility were not likely to result in significant adverse impacts to protected
 13 areas.⁴⁵ In *Final Order on Request for Amendment 7*, the Council found that these findings
 14 applied to the structures proposed for reconfigured Unit 2 in part because those structures
 15 were similar in type and smaller than those constructed for Unit 1.⁴⁶

⁴⁴ In *Request for Amendment #11*, the certificate holder identified two potential protected areas that were not evaluated in previous Orders: Barnes State Park in Washington, and the Blind Slough Net Pen. Upon review, the Department has determined that neither area is a Protected Area under OAR 345-022-0040. As a Washington State Park, Barnes State Park is not considered ed to be a Projected Area by the EFSC Protected Areas standard as it is not a state park or waysides listed by the Oregon Department of Parks and Recreation and the Willamette River Greenway as described under OAR 345-022-0040(1)(h). Similarly, the Blind Slough Net Pen is operated and managed by Clatsop County and is not a national or state hatcheries as described under OAR 345-022-0040(1)(f). Seaquest State Park and Trojan Pond, which were evaluated in the *Final Order on the Application* are not evaluated here for the same reasons. The Department has also removed Elochoman Hatchery, which is now closed, from the evaluation. Areas included in *Request for Amendment #7* that were misidentified or are no longer active and were not addressed in previous ~~Order~~s are not evaluated.

⁴⁵ Final Order on the Application, pp. 70-74

⁴⁶ Final Order on Amendment #7. 2010. Pg. 14

1
2 As discussed in Section ~~III.M. Public Services: OAR 345-022-0110~~~~III.M. Public Services: OAR 345-~~
3 ~~022-0110~~, the design, construction, and operation of the BESS is not expected to significantly
4 alter the traffic, water use, or wastewater disposal impacts of the facility. There may be a
5 temporary increase in traffic near the facility and on Highway 30 during construction of the
6 proposed BESS, but this is expected to be substantially less impactful than construction of Unit
7 1 or Unit 2. In addition, the closest protected area to the BESS, the Crim’s Island Unit of the Julia
8 Butler Hansen Refuge for the Columbian White-Tailed Deer, is separated from the facility site
9 by Bradbury Slough of the Columbia River and is only accessible by boat.

10
11 As discussed in Section ~~III.Q.1. Noise Control Regulations: OAR 340-035-0035~~~~III.Q.1. Noise~~
12 ~~Control Regulations: OAR 340-035-0035~~, the operation of the BESS is not expected to
13 substantially alter the noise impacts of the facility. The significance of potential noise impacts to
14 identified protected areas is based on the magnitude and likelihood of the impact on the
15 affected human population or natural resource that uses the protected area.⁴⁷ In section 10.1
16 of *Request for Amendment 11*, the certificate holder explains that noise from construction
17 activities associated with BESS will generally be of lesser magnitude and duration than
18 construction of Units 1 and 2. As discussed in section III.H and III.I, the Julia Butler Hansen
19 Refuge for the Columbian White-Tailed Deer is important habitat for Columbian White-Tailed
20 Deer as well as several avian species; however, considering applicable existing site certificate
21 conditions in section D.8 and E.1.a, noise from construction is not likely to result in a significant
22 adverse impact on protected areas. Additionally, as noted, it should be further noted that the
23 Refuge is separated from the facility by the Columbia River, and that there is existing
24 disturbance from the operating power plants Unit 1 and 2, and other heavy industrial facilities
25 in the area.

26
27 During operation of BESS, little to no additional impact to protected areas is anticipated
28 compared to any existing impact that may result from the operation of Units 1 and 2, as well as
29 other heavy industrial facilities in the area. In section 5.9 of *Request for Amendment 11*, the
30 certificate holder explains that even if modular containers are stacked to a height of 20 feet,
31 existing facility structures would likely block the proposed BESS from view from nearby units of
32 the Julia Butler Hansen Refuge. Even if visible, as discussed in Section ~~III.J. Scenic Resources:~~
33 ~~OAR 345-022-0080~~~~III.J. Scenic Resources: OAR 345-022-0080~~, the BESS is proposed to be
34 constructed adjacent to larger industrial structures and is unlikely to create significant adverse
35 visual impacts on protected areas if constructed in compliance with existing site certificate
36 conditions adopted in Section D.10 of the Site Certificate. As shown on the table above, all
37 other protected areas are considerable further from the facility than the Refuge. As such,
38 impacts from construction and operation of the BESS would be anticipated as less than at the
39 Refuge, and not likely to cause a significant adverse impact.

40
41 **Conclusions of Law**

⁴⁷ See OAR 345-001-0010(53).

1 Based on the foregoing findings, and subject to compliance with the existing site certificate
2 conditions, the Department recommends the Council conclude that the design, construction
3 and operation of the facility, with proposed changes, would not be likely to result in significant
4 adverse impacts to any protected areas, in compliance with the Council’s Protected Area
5 standard.

6
7 **III.G. Retirement and Financial Assurance: OAR 345-022-0050**

8
9 *To issue a site certificate, the Council must find that:*

10
11 *(1) The site, taking into account mitigation, can be restored adequately to a useful, non-*
12 *hazardous condition following permanent cessation of construction or operation of the*
13 *facility.*

14
15 *(2) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a*
16 *form and amount satisfactory to the Council to restore the site to a useful, non-*
17 *hazardous condition.*

18
19 **Findings of Fact**

20 The Retirement and Financial Assurance standard requires a finding that the facility site can be
21 restored to a useful, non-hazardous condition at the end of the facility’s useful life, should
22 either the certificate holder stop construction, or should the facility cease to operate. In
23 addition, it requires a demonstration that the certificate holder can obtain a bond or letter of
24 credit in a form and amount satisfactory to the Council to restore the site to a useful, non-
25 hazardous condition.

26
27 *Restoration of the Site Following Cessation of Construction or Operation*

28
29 OAR 345-022-0050(1) requires the Council to find that the site of the facility, with proposed
30 changes, can be restored to a useful non-hazardous condition at the end of the facility’s useful
31 life. In *Request for Amendment 11*, certificate holder explains that the BESS may be
32 decommissioned before the rest of the Port Westward power plant facility fully ceases
33 operations. The certificate holder proposes the following procedures for separate retirement
34 and restoration of the BESS:

- 35
36
- If lithium-ion batteries are selected, the batteries will be removed, packaged, and
37 transported to an offsite disposal or recycling facility.
 - If flow batteries are selected, the batteries will be removed as modules containing
38 electrolyte fluid, packaged, and transported to an offsite disposal or recycling facility.
39 Electrolyte fluids may be nonhazardous, or may be classified as hazardous liquid,
40 depending on the final technology selected. For purposes of estimating disposal costs,
41 certificate holder assumes that disposal of hazardous liquid will be required.
 - Remaining above ground system components and structures will then be dismantled
42 using industry standard methods and transported to an offsite disposal/recycling facility.
43
44

- 1 • Concrete pads/foundations may be broken to a maximum of 3 feet below grade,
2 excavated, and transported to an offsite disposal/recycling facility or left in place until
3 the final decommissioning of the facility.
- 4 • Underground utilities will be removed to a maximum of 3 feet below grade and
5 transported to an offsite disposal/recycling facility or left in place until the final
6 decommissioning of the facility.
- 7 • The area will be returned to pre-construction conditions, which consists of an asphalt
8 surface.

9
10 Certificate holder notes that the number and layout of modular containers, inverters, and
11 transformers may depend on technology and will be finalized prior to construction. Because
12 decommissioning cost estimates are depended on the battery chemistry selected as described
13 below, either flow or lithium-ion, the Department recommends adding a new condition to
14 require the certificate holder to provide updated design information, prior to construction of
15 the BESS:

16
17 D.3(17) Before beginning construction of the BESS authorized by the Eleventh Amended site
18 certificate, the certificate holder shall provide updated design information for the BESS
19 including, but not limited to, battery chemistry and the number and layout of modular
20 containers, inverters, and transformers for the BESS.

21
22 In the Final Order on the Application, the Council found that the facility site could be restored
23 adequately to a useful, non-hazardous condition following permanent cessation of construction
24 or operation of the facility. The Council has previously adopted other conditions in Section D.3
25 of the site certificate to ensure compliance with the Retirement and Financial Assurance
26 Standard. These conditions require retirement of the facility upon permanent cessation of
27 operations (Condition D.3(1)) in accordance with a retirement plan (Condition D.3(2)), along
28 with related annual reporting requirements (Condition D.3(6)).

29
30 *Bond or Letter of Credit*

31 OAR 345-022-0050(2) requires the Council find the applicant has a reasonable likelihood of
32 obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore
33 the site to a useful, non-hazardous condition.

34
35 In accordance with site certificate Condition D.3(5), a letter of credit for the existing facility is
36 currently maintained and updated annually. In the most recent update (for 2019), the letter of
37 credit stood at \$10,840,325.

38
39 Certificate holder estimates costs of decommissioning of the BESS at \$136,763 for lithium-ion
40 batteries and \$637,635 for flow batteries.⁴⁸ The estimate for flow batteries assumes that
41 battery fluids would be classified as hazardous waste, adding significant costs. The Department
42 has reviewed the cost and finds them sufficient.

⁴⁸ Request for Amendment 11, Attachment 3.

1
2 Certificate holder sites its compliance with site certificate condition D.3(5) as evidence of its
3 ability to obtain a bond or letter of credit. Because the amount associated with retirement of
4 the BESS is small in comparison with the amount of the existing bond, certificate holder did not
5 provide a new bank letter as part of the request. Certificate holder proposes to obtain either a
6 separate letter of credit or combined letter of credit with the existing facility prior to
7 construction. Certificate holder proposes addition of a new condition to require submission of
8 a new bond or letter of credit, or increasing the amount of the existing bond or letter of credit
9 in the amount estimated for the selected technology to demonstrate compliance with this
10 Standard. The Department agrees, and recommends additional modifications to Site
11 Certificate Conditions D.3(5)(f) and the proposed new condition to ensure the methods for
12 determining the present value of the new required security, and inflation adjustments are
13 consistent with the security on file for Units 1 and 2:

14
15 ~~D.3(5)(f) The calculation of 1st quarter 2010 dollars (or 2002 dollars for purposes of any~~
16 ~~five year supplemental payments for carbon dioxide offsets for power augmentation on~~
17 ~~Unit 1) present value of dollar amounts in this site certificate shall be made calculated~~
18 using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as
19 published in the Oregon Department of Administrative Services' "Oregon Economic and
20 Revenue Forecast," or by any successor agency (the "Index") . If at any time the Index is
21 no longer published, the Council shall select a comparable calculation ~~of 2002, 2004 and~~
22 ~~2010 dollars.~~ [Amendments No. 3, 6, and 7, & 11]

23
24 (18) Before beginning construction of the BESS, the Certificate Holder shall submit a
25 bond or letter of credit in the amount of \$136,736 (1st Quarter 2019 dollars) for a
26 lithium-ion BESS and \$637,635 (1st Quarter 2019 dollars) for a flow BESS, subject to the
27 same requirements as D.3(5)(d) through (h).

28
29 Based on the assessment provided here, and because the estimated retirement amounts are
30 small in comparison to the current letter of credit on file for the facility, Department
31 recommends Council find that the certificate holder has a reasonable likelihood of obtaining a
32 bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a
33 useful, non-hazardous condition.

34 **Conclusions of Law**

35
36 Based on the foregoing findings of fact, and subject to compliance with the existing and
37 recommended new site certificate conditions, the Department recommends that the Council
38 find that the facility, with proposed changes, would comply with the Council's Retirement and
39 Financial Assurance standard.

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

41
42
43 *To issue a site certificate, the Council must find that the design, construction and*
44 *operation of the facility, taking into account mitigation, are consistent with:*

1
2 (1) *The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-*
3 *0025(1) through (6) in effect as of February 24, 2017****

4
5 **Findings of Fact**

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

14
15 The analysis area for potential impacts to fish and wildlife habitat, as defined in the project
16 order, is the area within the site boundary and extending 0.25 miles from the proposed BESS
17 location and spoils disposal site. As described in the *Final Order on the Application*, Habitat
18 Categories 2, 3, 4, and 6 occur within the analysis area.

19
20 *Potential Impacts from Construction and Operation of the BESS*

21 In the *Request for Amendment 11*, the certificate holder explains that the proposed BESS would
22 be sited on approximately 0.2 acres of previously disturbed Category 6 habitat inside the
23 existing facility site boundary. No additional loss of habitat quantity is expected. In accordance
24 with the EFSC Fish and Wildlife Habitat standard and the ODFW Fish and Wildlife Habitat
25 Mitigation policy, impacts to Category 6 habitat do not require mitigation.

26
27 The certificate holder explains that there may be temporary disturbance of a small portion of
28 Category 4 non-native grassland if spoils from construction are placed at the spoils disposal site
29 previously approved and used during Unit 1 and Unit 2 construction. The spoils disposal site
30 was most recently disturbed during Unit 2 construction in 2014 and is currently revegetating.
31 The certificate holder states that the previously disturbed grassland area would be revegetated
32 per site certificate requirements. ~~The certificate holder has proposed amendments to~~
33 ~~conditions related to revegetation and noxious weed control that are discussed separately~~
34 ~~below.~~ The certificate holder notes that the Columbian white-tailed deer (*Odocoileus*
35 *virginianus leucurus*), a federally-listed threatened species, is known to occur in the vicinity of
36 the facility and could forage at the spoils disposal site, but the spoils site is not part of mapped
37 Columbian white-tailed deer habitat.⁴⁹ Per ODFW policy guidance, temporary impacts to
38 grassland habitat do not require compensatory mitigation if the impacts are revegetated and
39 restored. As described below, the certificate holder is proposing amendments to the
40 revegetation and noxious weed control plan for the facility.

41

⁴⁹ Request for Amendment 11, p. 36. The Columbian white-tailed deer is not listed as threatened or endangered by the Oregon Department of Fish and Wildlife.

1 Because the temporary disturbance of the spoils disposal site would be of a similar nature and
2 lesser magnitude than disturbance associated with construction of Unit 1 and 2, the
3 Department recommends that, subject to compliance with existing site certificate conditions
4 described here, construction and operation of the BESS will not alter the Council's basis for its
5 previous findings that the Facility complies with the Fish and Wildlife Habitat standard. The
6 spoils disposal site, if redisturbed by construction of BESS, would be revegetated and restored
7 in accordance with the amended revegetation and noxious weed control plan.

8
9 Indirect effects on habitat within the analysis area during construction and operation of the
10 BESS could occur due to noise, traffic, human activity, maintenance activities, and operation of
11 the energy facility, as amended. The Council adopted Conditions in Section D.8 of the Site
12 Certificate to minimize these indirect impacts. In *Request for Amendment 11*, Certificate Holder
13 states that Conditions D.8(1),(2),(4) through (7), (10), (12), (14), (15), and (18), are applicable to
14 the construction and operation of the BESS, and reduce potential impacts.

15
16 The Certificate holder also proposes a change to Condition D.8(8) to make its requirements
17 applicable to site preparation and construction of the BESS:

18
19 D.8(8) As possible and practicable, the Certificate Holder shall conduct site preparation
20 for construction of the PW2 facility, or the BESS, in a manner that minimizes potential
21 for impacting nesting native birds protected by the Migratory Bird Treaty Act (MBTA),
22 such as conducting initial site clearing outside of the breeding season for most birds
23 (generally March-July). Prior to commencement of construction activity during the
24 breeding season, a qualified biologist will conduct a walk-down of the construction site
25 to determine the presence of any active bird nests and to rescue and relocate any
26 nongame protected wildlife (OAR 635-045-0002) that may be encountered according to
27 the methods provided by ODFW. Surveys will be conducted by a qualified wildlife
28 biologist and will include complete coverage of all areas to be disturbed using
29 systematic transects spaced a maximum of 5 meters apart. As applicable considering
30 construction schedule, PGE will also conduct a survey beginning in March prior to
31 construction to detect any streaked horned larks that could be using the very limited
32 amount of potential breeding habitat on site. PGE's survey protocol methods will be
33 coordinated with ODFW. Construction personnel will be trained regarding avian
34 awareness issues and reporting of bird nests and dead birds found at the construction
35 site (also see Condition D.8(1) for wildlife awareness requirements). The Certificate
36 Holder will consult with USFWS and ODFW regarding any active bird nests found within
37 the construction disturbance area.

38
39 The Department agrees that these conditions are applicable and recommends the Council
40 approve this proposed change. The Department also recommends that existing site certificate
41 Conditions D.8(11), (19) through (24), and (26) are applicable to construction of the proposed
42 BESS; however, the certificate holder has proposed changes to these conditions that would
43 affect their applicability. These changes are discussed below.

1 Potential Impacts from changes not specific to the BESS

2 The certificate holder has also proposed several changes to conditions in Section D.8 of the Site
3 Certificate that are not specific to construction and operation of the BESS.

4
5 Existing Condition D.8(11) requires the certificate holder locate chemical storage, servicing of
6 construction and maintenance equipment and vehicles, and overnight storage of wheeled
7 vehicles at least 330 feet from any wetland or waterway. In *Request for Amendment 11*, the
8 certificate holder explains that the 330-ft buffer is not an industry standard and is not required
9 by the Oregon Department of State Lands or Army Corps of Engineers. The certificate holder
10 states that, for areas within the energy facility site boundary, the condition is not necessary to
11 minimize impacts to wildlife habitat because existing Conditions D.6(7) through (9) require all
12 chemicals to be stored in appropriate spill containment areas and because the area within the
13 facility site boundary is designed so that all storm water remains on-site and flows to one of
14 four on-site storm water retention ponds, where it is contained and can be cleaned up. Because
15 these improvements are not in place in the transmission corridor, the certificate holder
16 proposes to amend Condition D.8(11) so that it only applies to the transmission corridor. The
17 amended condition would read as follows:

18
19 D.8(11) “The Certificate Holder shall locate chemical storage, servicing of construction
20 and maintenance equipment and vehicles, and overnight storage of wheeled vehicles
21 associated with construction and maintenance of the transmission line at least 330 feet
22 from any wetland or waterway.”

23
24 An objection to the proposed amendment of Condition D.8(11) was raised during the public
25 hearing on the DPO. The objection was based on concerns about potential impacts to wetlands
26 and waterways near the facility. Because the area that would be affected by this amendment is
27 subject to other conditions that require any chemical storage to be stored in a paved area with
28 a curb, or within appropriately-sized and compatible secondary containment, as described in
29 Section III.D. Soil Protection: OAR 345-022-0022, the Department recommends that amending
30 the proposed condition is not likely to result in a significant adverse impact to wetlands or
31 waterbodies. The Department notes; however, that the Condition, as proposed, may be read so
32 that the proposed amendment only applies to overnight storage of wheeled vehicles, and that
33 the condition would still apply to all chemical storage and servicing of vehicles would continue.
34 To address this potential ambiguity, the Department recommends amending D.8(11) as follows:

35
36 D.8(11) “The Certificate Holder shall locate chemical storage, servicing of construction
37 and maintenance equipment and vehicles, and overnight storage of wheeled vehicles
38 within the energy facility site boundary, or at least 330 feet from any wetland or
39 waterway.”

40
41 Existing site certificate Conditions D.8(19) through (24) and (26) contain procedures and
42 requirements for revegetation and control of noxious weeds in riparian areas and wetlands
43 along the transmission right of way, areas temporarily disturbed by construction, temporary
44 construction staging and laydown areas, and the spoils disposal area. In *Request for*

1 *Amendment 11*, the certificate holder proposes to remove these conditions from the site
2 certificate and move the conditions to a Revegetation and Noxious Weed Control Plan, which
3 would be governed by a new Condition proposed by the certificate holder:
4

5 D.8(28) The Certificate Holder shall develop and implement a Revegetation and Noxious
6 Weed Control Plan. The Revegetation and Noxious Weed Control Plan must be
7 approved by the Department prior to construction and may be amended from time to
8 time by agreement of the certificate holder and the Oregon Energy Facility Siting Council
9 ("Council"). Such amendments may be made without amendment of the site certificate.
10 The Council authorizes the Department to agree to amendments to this plan. The
11 Department shall notify the Council of all amendments, and the Council retains the
12 authority to approve, reject, or modify any amendment of this plan agreed to by the
13 Department.

14
15 The Department recommends a modification of this proposed amendment to approve the
16 Revegetation and Noxious Weed Control Plan included as Attachment D to this Order, and
17 require its implementation:
18

19 D.8(28) The Certificate Holder shall develop and implement a Revegetation and Noxious
20 Weed Control Plan. The Revegetation and Noxious Weed Control Plan must be
21 approved by the Department prior to construction **of the BESS**, and may be amended
22 from time to time by agreement of the certificate holder and the Oregon Energy Facility
23 Siting Council ("Council"). Such amendments may be made without amendment of the
24 site certificate. The Council authorizes the Department to agree to amendments to this
25 plan. The Department shall notify the Council of all amendments, and the Council
26 retains the authority to approve, reject, or modify any amendment of this plan agreed
27 to by the Department.

28
29 Under the proposed amendment, the certificate holder would be able to modify success criteria
30 and monitoring methods in the Revegetation and Noxious Weed Control plan without
31 amendment to the site certificate. Certificate holder explains that any changes to the
32 revegetation requirements contained in the plan would require approval of the Department,
33 and the Council would retain the authority to approve, reject, or modify any amendment of the
34 plan. The Department notes that all current and recent EFSC-jurisdictional energy facilities
35 contain a very similar or identical such requirement. Port Westward Generating Project was
36 unusual in that it did not contain a stand-alone Revegetation and Noxious Weed Control Plan,
37 rather, the elements of what constitute certificate holder's obligations for revegetation and
38 noxious weed control were contained in conditions in the site certificate. This is a cumbersome
39 **organization** and requires amendments to the site certificate in order to change minor
40 revegetation or noxious weed control procedures or measures. As such, the Department
41 recommends that Council approve Condition D.8(28) and the implementation of a Revegetation
42 and Noxious Weed Control Plan, as discussed in this order and in *Request for Amendment 11*.
43

1 The certificate holder has also proposed to amend Condition D.8(14) to reference the
2 Revegetation plan included as Attachment 4b of Request for Amendment No. 11; the
3 Department has included the plan as Attachment D to this order. Accordingly, the Department
4 recommends Site Certificate D.8(14) be amended as follows:

5
6 D.8(14) The Certificate Holder shall restore temporary upland and wetland disturbance
7 areas by returning the areas to their original grade and seeding, with appropriate seed
8 mixes as recommended by ODFW and as described in ~~Exhibit P, Section P.8.1, of the~~
9 ~~Certificate Holder's Request for Amendment No. 7, and by mulching the area with straw~~
10 the Revegetation and Noxious Weed Control Plan included as Attachment D to the Final
11 Order on Site Certificate Amendment No. 11.

12
13 The Certificate holder has also provided proposed revisions to the revegetation plan included as
14 Attachment D to this order. Major changes include:

- 15
- 16 • Removing provisions that are complete and no longer relevant.
 - 17 • Revising the seed mix for revegetation of upland disturbance areas to include 50%
 - 18 grasses, 35% perennial flowers, and 15% annual flowers.
 - 19 • Incorporation and modification of the revegetation success criteria in existing Site
 - 20 Certificate Condition D.8(26)(3) to read as follows:
 - 21 • The vegetation percent cover by native species and desirable non-native species (i.e.,
 - 22 non-noxious weeds, both seeded and naturally recruited) is 80 percent or more, or the
 - 23 native species component is not significantly less than the native species percent cover
 - 24 of surrounding undisturbed areas.
 - 25 • Noxious weeds are absent or constitute only a small percentage (<5%) of vegetation
 - 26 otherwise dominated by native or desirable non-native species.
 - 27 • The percentage of bare soil (excluding rocky areas) in the sample plot is <10%, or not
 - 28 significantly greater than the percentage of bare soil in surrounding undisturbed areas.
 - 29 • Vegetation percent cover goals may be adjusted to match the typical percent cover in
 - 30 nearby undisturbed areas as measured with paired monitoring plots.

31
32 The revised success criteria allow the certificate holder to revegetate disturbed areas with a
33 larger proportion of desirable non-native species. In *Request for Amendment 11*, the certificate
34 holder explains that the limit of 20% coverage by non-native species was not achievable
35 considering the previous condition of temporarily disturbed areas and the existing condition of
36 undisturbed areas in the project vicinity (i.e., non-native grasslands). ODFW also found that the
37 “criteria originally established in the revegetation plan may have been challenging to meet
38 given the larger patterns of noxious weed abundance and spread on the larger
39 landscape”, and recommended that the certificate holder establish paired monitoring plots
40 outside the revegetation area that could be used for comparison with the monitoring plots
41 inside the revegetation area to assess whether the revegetation efforts were trending toward
42 success, calibrated by the larger landscape forces.⁵⁰ The Department notes that the amended

⁵⁰ Letter from Sarah Reif, ODFW. July 26, 2019.

1 success criteria would only affect the allowed proportions of native and desirable non-native
2 species, and does not allow a greater proportion of noxious weeds.

3
4 ODFW has reviewed the Request for Amendment_11 including the proposed Revegetation and
5 Noxious Weed Control Plan and stated that the methods and criteria it contains were
6 consistent with changes discussed by ODFW and the certificate holder, and that the criteria
7 would continue to meet the requirements of the Fish and Wildlife Habitat Standard.

8
9 The Department has reviewed the proposed changes and agrees that, with the proposed
10 revisions to the Revegetation and Noxious Weed Control Plan, the removal of Site Certificate
11 Conditions D.8(19) through (24) and (26), and addition of proposed site certificate condition
12 D.8(28) does not alter the Council's basis for its previous findings that the Facility complies with
13 the Fish and Wildlife Habitat standard.

14
15 **Conclusions of Law**

16 Based on the foregoing findings of fact and conclusions, and subject to compliance with existing
17 and recommended amended site certificate conditions D.8(1),(2),(4) through (7), (10), (12),
18 (14), (15), and (18), the Department recommends the Council find that facility, with proposed
19 changes, would continue to comply with the Council's Fish and Wildlife Habitat standard.

20
21 **III.I. Threatened and Endangered Species: OAR 345-022-0070**

22
23 *To issue a site certificate, the Council, after consultation with appropriate state agencies,*
24 *must find that:*

25
26 *(1) For plant species that the Oregon Department of Agriculture has listed as threatened*
27 *or endangered under ORS 564.105(2), the design, construction and operation of the*
28 *proposed facility, taking into account mitigation:*

29
30 *(a) Are consistent with the protection and conservation program, if any, that the Oregon*
31 *Department of Agriculture has adopted under ORS 564.105(3); or*

32
33 *(b) If the Oregon Department of Agriculture has not adopted a protection and*
34 *conservation program, are not likely to cause a significant reduction in the likelihood of*
35 *survival or recovery of the species; and*

36
37 *(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as*
38 *threatened or endangered under ORS 496.172(2), the design, construction and operation*
39 *of the proposed facility, taking into account mitigation, are not likely to cause a*
40 *significant reduction in the likelihood of survival or recovery of the species.*

41
42 **Findings of Fact**

43 The Threatened and Endangered Species standard requires the Council to find that the design,
44 construction, and operation of a proposed facility, or facility with proposed changes, are not

1 likely to cause a significant reduction in the likelihood of survival or recovery of a fish, wildlife,
2 or plant species listed as threatened or endangered by Oregon Department of Fish and Wildlife
3 (ODFW) or Oregon Department of Agriculture (ODA). For threatened and endangered plant
4 species, the Council must also find that a proposed facility, or facility with proposed changes, is
5 consistent with an adopted protection and conservation program from ODA. Threatened and
6 endangered species are those listed under ORS 564.105(2) for plant species and ORS 496.172(2)
7 for fish and wildlife species. For the purposes of this standard, threatened and endangered
8 species are those identified as such by either the Oregon Department of Agriculture or the
9 Oregon Fish and Wildlife Commission.

10
11 The analysis area for threatened or endangered plant and wildlife species is the area within and
12 extending 5-miles from the proposed site of the BESS.

13
14 Potential Impacts to Threatened and Endangered Species

15 Section 8.8 of *Request for Amendment 11* provides an updated list of state and federal listed,
16 candidate and proposed species with the potential to occur within the analysis area based on
17 searches of the US Fish and Wildlife Service IPaC database and the Oregon Biological
18 Information Center database. The certificate holder identifies critical habitat for marbled
19 murrelet (*brachyramphus marmoratus*), a state threatened species, within the analysis area but
20 the species has not been found within 300 feet of the facility site boundary during ~~precious~~
21 previous surveys. The certificate holder explains that no state threatened or endangered plant
22 species have been found during previous surveys of the area within 300 feet of the facility site
23 boundary, and none are likely to occur in the developed and previously disturbed habitat
24 categories to be impacted by the BESS.⁵¹ The certificate holder explains that an analysis of
25 potential impacts to threatened and endangered aquatic species was not included in *Request*
26 *for Amendment 11* because there is no potential for the design, construction, or operation of
27 the BESS to impact aquatic habitat.

28
29 In the Final Order on the Application, the Council found that the design, construction and
30 operation of facility would not have the potential to significantly reduce the likelihood or the
31 survival or recovery of any threatened or endangered plant or wildlife species listed under
32 Oregon law. The Council adopted conditions in section D.9 of the site certificate to ensure
33 compliance with the Threatened and Endangered Species standard. The majority of these
34 conditions are associated with construction and operation of the transmission line and none
35 are applicable to *Request for Amendment 11*. Subsequent Orders have confirmed that the
36 design, construction, and operation of the facility does not have the potential to significantly
37 reduce the likelihood or the survival or recovery of any threatened or endangered species listed
38 under Oregon law.

39

⁵¹ The certificate holder explains that Columbian white-tailed deer (*Odocoileus virginianus leucurus*), a federally listed species, is known to occur in the vicinity of the facility and could forage at the spoils disposal site. The Council's standard does not specifically address federally-listed threatened or endangered species; however, the certificate holders must comply with all applicable federal laws, including laws protecting those species, independent of the site certificate.

1 Because no state listed threatened or endangered species are known to occur within the
2 analysis area for *Request for Amendment 11*, the Department recommends that the design,
3 construction, and operation of the BESS will not alter the Council’s basis for its previous findings
4 that the Facility complies with the standard.

5
6 In *Request for Amendment 11* the certificate holder proposes to delete Condition D.9(9). The
7 condition requires PGE to obtain a Biological Opinion from the U.S. Fish and Wildlife Service
8 before starting construction during the bald eagle nesting period. The certificate holder
9 explains that because the bald eagle is no longer a state or federally listed species Biological
10 Opinions for this species are no longer applicable. Accordingly, the Department recommends
11 deletion of this Condition as proposed by the certificate holder.⁵²

12 **Conclusions of Law**

13
14 Based on the foregoing findings of fact and conclusions, and subject to compliance with existing
15 site certificate conditions, the Department recommends that the Council find that the facility,
16 with proposed changes, would continue to comply with the Council’s Threatened and
17 Endangered Species standard.

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

19
20
21 *(1) Except for facilities described in section (2), to issue a site certificate, the Council must*
22 *find that the design, construction and operation of the facility, taking into account*
23 *mitigation, are not likely to result in significant adverse impact to scenic resources and*
24 *values identified as significant or important in local land use plans, tribal land*
25 *management plans and federal land management plans for any lands located within the*
26 *analysis area described in the project order.*

27 **Findings of Fact**

28
29 The Scenic Resources Standard requires the Council to determine that the design, construction
30 and operation of the proposed facility are not likely to result in a significant adverse impact to
31 any significant or important scenic resources and values within the analysis area.

32
33 The analysis area for the evaluation of scenic resources, as defined in the project order, is the
34 area within and extending five miles from the site boundary.⁵³ Table 3 lists scenic resources
35 and values identified as significant or important in the Columbia County Comprehensive Plan

⁵² [During the Public Hearing on the DPO, one commenter raised concerns about the proposed removal of Condition D.9\(9\) because Bald Eagles continue to be protected under the Bald and Golden Eagle Act. The Department notes that removal of the condition does not relieve the duty of the certificate holder to comply with the Bald and Eagle Protection Act, the Migratory Bird Treaty Act, or other federal regulations.](#)

⁵³ Since the issuance of the First Amended Project Order, OAR 345-001-0010(59)(b) was updated to expand the study area for scenic resources from five to ten miles; however, the appropriate analysis area for scenic resources for the facility remains at five miles as specified in the *First Amended Project Order*.

1 (CCCP).⁵⁴ The certificate holder notes that the CCCP has been updated since Council approved
 2 Amendment 10, but no additional scenic resources were identified. Only one scenic resource, a
 3 one-mile section of Highway 47 between Pittsburg and Clatskanie, is within the analysis area.
 4

5 **Table 3. Scenic resources identified in the Columbia County Comprehensive Plan (Columbia County**
 6 **1984, updated Nov. 2013).**

Resource	Site	Distance & Direction from BESS
Scenic Sites	Beaver Creek Falls Carcus Creek Falls Lava Creek Falls Clatskanie River (Apiary Falls to Carcus Creek) Scaponia Recreation Site	5.1 miles, SSE 13.1 miles, SSE 12.3 miles, S 12.1-9.9 miles, SSE 22.9 miles, S
Scenic Highways	Hwy. 30 between Deer Island and Rainier Hwy. 47 between Washington County Line and Treharne Pittsburg and Clatskanie	12.8-22.7 miles, ESE-SE 18.7 miles, S 4.8 miles, SSW
Scenic Views	Wayside north of Rainier on Hwy. 30 Wayside north of Rainier on Old Columbia River Hwy.	9.7 miles, ESE 10 miles, ESE
SSE - South Southeast, SSW – South Southwest, S - South, ESE - East Southeast, SE - Southeast		

7
 8 Council previously found that the facility, as modified through Amendment 10, complied with
 9 the Scenic Resources Standard based on analysis of the CCCP.⁵⁵

10
 11 In *Request for Amendment 11*, the certificate holder explains that design, construction and
 12 operation of the BESS is not likely to result in significant adverse impact to the scenic section of
 13 Highway 47 between Pittsburg and Clatskanie because the BESS will not be visible from the
 14 section, which is 4.8 miles from the facility site.
 15

⁵⁴ In section 8.9 of *Request for Amendment 11*, the certificate holder explains that it reviewed comprehensive plans for Columbia County, Oregon and Cowlitz and Wahkiakum counties in Washington. The Certificate holder also states that it called and sent letters to representatives of the Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indian Reservation of Oregon, and the Chinook Nation in Washington. Only the Columbia County Comprehensive Plan identified scenic resources and values. The certificate holder also reviewed the 2010 Comprehensive Conservation Plan and Environmental Impact Statement for the two units of the Julia Butler Hansen Refuge for the Columbian White-tailed Deer in the analysis area and found the units are not managed for any scenic resources. (USFWS 2010).

⁵⁵ Final Order on the Application, p. 96; Final Order on Amendment 7, p. 23; Final Order on Amendment 10, p. 26.

1 **Conclusion of Law**

2 Based on the findings of fact above, the Department recommends that the Council find that the
3 facility as modified by *Request for Amendment 11* continues to comply with the Council’s Scenic
4 Resources standard.
5

6 **III.K. Historic, Cultural, and Archaeological Resources: OAR 345-022-0090**
7

8 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
9 *Council must find that the construction and operation of the facility, taking into account*
10 *mitigation, are not likely to result in significant adverse impacts to:*
11

12 *(a) Historic, cultural or archaeological resources that have been listed on, or would likely*
13 *be listed on the National Register of Historic Places;*
14

15 *(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a),*
16 *or archaeological sites, as defined in ORS 358.905(1)(c); and*
17

18 *(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).*
19

20 *(2) The Council may issue a site certificate for a facility that would produce power from*
21 *wind, solar or geothermal energy without making the findings described in section (1).*
22 *However, the Council may apply the requirements of section (1) to impose conditions on*
23 *a site certificate issued for such a facility.*
24

25 * * *

26 **Findings of Fact**

27 OAR 345-022-0090(1), generally requires the Council to find that the proposed amended facility
28 is not likely to result in significant adverse impacts to identified historic, cultural, or
29 archaeological resources. The analysis area for the evaluation of potential impacts to identified
30 historic, cultural or archeological resources is the area within the site boundary.
31

32 In the *Final Order on the Application*, the Council found that the design, construction and
33 operation of the facility were not likely to result in significant adverse impacts to identified
34 historic, cultural and archaeological resources (collectively referred to as “cultural resources”)
35 for the area within the site boundary.⁵⁶ The Council adopted conditions in section D.11 of the
36 site certificate to ensure compliance with the Historic, Cultural, and Archaeological Resources
37 standard.
38

39 In the *Final Order on Amendment 7*, the Council found that the design, construction and
40 operation of the proposed Unit 2 were not likely to result in significant adverse impacts to

⁵⁶ Final Order on the Application, pp. 96-100.

1 identified historic, cultural and archaeological resource, taking into account the conditions
2 adopted in section D.11 of the site certificate.⁵⁷

3
4 In the Final Order on Amendment 10, the Council found that the proposed amendment would
5 not alter the potential impacts of the facility on cultural resources. There has been no change in
6 facts or circumstances that would affect the Council’s findings on the previously-approved site
7 for the facility.

8
9 A cultural survey of the spoils disposal area was completed in 2001 as part of the Water
10 Discharge Alignment Reroute for the facility. In Section 8.10 of *Request for Amendment 11*, the
11 certificate holder notes that on January 11, 2019, John Pouley of SHPO confirmed no additional
12 surveys of the spoils disposal area are necessary because of the nature of the site and the
13 disturbance. The certificate holder states that it will comply with all existing site certificate
14 conditions related to Cultural and Archaeological Resources in Section D.11 of the site
15 certificate that are applicable to the design, construction, and operation of the proposed BESS.
16 The certificate holder states, and the Department confirms, that these include Conditions
17 D.11(2) through (5).

18
19 **Conclusions of Law**

20 Based on the findings of fact above, and subject to compliance with existing Conditions D.11(2)
21 through (5), the Department recommends the Council find that the facility, as modified by
22 *Request for Amendment 11*, would continue to comply with the Council’s Historic, Cultural, and
23 Archaeological Resources Standard.

24
25 **III.L. Recreation: OAR 345-022-0100**

26
27 *(1) Except for facilities described in section (2), to issue a site certificate, the Council must*
28 *find that the design, construction and operation of a facility, taking into account*
29 *mitigation, are not likely to result in a significant adverse impact to important*
30 *recreational opportunities in the analysis area as described in the project order. The*
31 *Council shall consider the following factors in judging the importance of a recreational*
32 *opportunity:*

- 33
34 *(a) Any special designation or management of the location;*
35 *(b) The degree of demand;*
36 *(c) Outstanding or unusual qualities;*
37 *(d) Availability or rareness;*
38 *(e) Irreplaceability or irretrievability of the opportunity.*

39 ***
40

⁵⁷ Final Order on Amendment 7, p. 23.

1 **Findings of Fact**

2 The Recreation standard requires Council to find that the design, construction, and operation of
 3 the facility is not likely result in significant adverse impacts to important recreational
 4 opportunities. The importance of recreational opportunities is assessed based on the factors
 5 outlined in the standard. The departments assessment of significant adverse impacts to
 6 important recreational opportunities is based on the potential of construction or operation of
 7 the facility, with the proposed changes, to result in any of the following: direct or indirect loss
 8 of an important recreational opportunity, excessive noise, increased traffic, and visual impacts
 9 of facility structures or plumes.

10
 11 In accordance with OAR 345-001-0010(59)(d) and consistent with the study area boundary, the
 12 analysis area for recreational opportunities is the area within and extending 5 miles from the
 13 site boundary.

14
 15 Existing recreational opportunities within the analysis area include the Columbia River,
 16 Clatskanie River, and numerous sloughs within the area from Clatskanie to Quincy. In Section
 17 8.11 of the *Request for Amendment 11*, the certificate holder lists important recreation sites
 18 within the analysis area including two county parks, two city parks, an ODFW owned and
 19 operated boat ramp, a fish technology center operated by the US Fish and Wildlife Service, and
 20 two points of interest. These sites are listed in Table 4, below.

21 **Table 4. Important recreation sites within the Analysis Area.**

Recreation Site	Type	Distance (direct path) and direction
Abernathy Fish Tech Center	Technology Center	3.5 miles, NNE
Abernathy Point	Point of Interest	0.9 miles, NNE
Beaver Boat Ramp and Park	County Park	5.2 miles, SSW
Clatskanie City Park	City Park	5.3 miles, SWW
County Line Park	County Park	2.3 miles, W
Mayger Boat Ramp	Boat Ramp	3.4 miles, ESE
Mill Creek	Point of Interest	0.7 miles, N
Willow Grove Boat Ramp and Park	Local Park	4.2 miles, E
NNE – North Northeast, SSW – South Southwest, W – West, ESE – East Southeast, N – North, E – East		

23
 24 Except for except the Willow Grove Boat Ramp and Park, the importance of and potential
 25 impacts of the design, construction, and operation of the facility on all listed recreational sites
 26 and opportunities were evaluated in previous Orders. The certificate holder states that there

1 have been no changes to the previously analyzed recreational sites or opportunities that modify
2 the relevant factors of management, demand, unusual qualities, rareness, or irreplaceability.⁵⁸

3
4 No analysis was previously conducted for Willow Grove Boat Ramp and Park; however, given its
5 distance from the proposed site of the BESS and location on the other side of Crim’s Island,
6 impacts of the facility on the park would likely be similar to other recreational opportunities
7 with similar use within the analysis area, and less than significant.

8
9 Under the Council’s Recreation standard, the Council must find that, taking into account
10 mitigation, the facility, with proposed changes, is not likely to result in a significant adverse
11 impact to those identified important recreational opportunities.

12
13 In the *Final Order on the Application*, the Council found that the energy facility would not
14 adversely affect any existing recreational opportunities within the analysis area and that there
15 would be no loss of recreational use.⁵⁹

16
17 The proposed BESS would be located within the site boundary of the Port Westward power
18 plant, and would not physically disturb, or result in ground disturbance, to the important
19 recreational opportunities identified within the analysis area. The facility, with proposed
20 changes, would also not require any temporary or permanent closure or removal of the
21 important recreation opportunities to public use.

22
23 As discussed in Sections ~~III.J. Scenic Resources: OAR 345-022-0080~~~~III.J. Scenic Resources: OAR~~
24 ~~345-022-0080~~, ~~III.M. Public Services: OAR 345-022-0110~~~~III.M. Public Services: OAR 345-022-~~
25 ~~0110~~, and ~~III.Q.1. Noise Control Regulations: OAR 340-035-0035~~~~III.Q.1. Noise Control~~
26 ~~Regulations: OAR 340-035-0035~~, the design, construction, and operation of the proposed BESS
27 are not expected to significantly alter the noise, traffic, water use, wastewater disposal, or
28 visual impacts of the facility. Temporary increases in noise and traffic from construction of the
29 BESS are expected to be less extensive than those from construction of Unit 1 and Unit 2, and
30 are not likely to affect the quality of recreational opportunities in the area. Construction of the
31 BESS would be short-term and limited in duration. During operation, the BESS would not cause
32 an increase in traffic, noise, water or wastewater use or disposal, or visual effects to
33 recreational opportunities.

34 35 **Conclusions of Law**

36 Based on the recommended findings of fact above, the Department recommends that the
37 Council find that the facility, as modified by the proposed changes, is not likely to result in a
38 significant adverse impact to important recreational opportunities in the analysis area, and
39 would continue to comply with the Council’s Recreation standard.

40

⁵⁸ Request for Amendment 11, p. 41

⁵⁹ Final Order on the Application, p. 102.

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

2
3 *(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the*
4 *Council must find that the construction and operation of the facility, taking into account*
5 *mitigation, are not likely to result in significant adverse impact to the ability of public*
6 *and private providers within the analysis area described in the project order to provide:*
7 *sewers and sewage treatment, water, storm water drainage, solid waste management,*
8 *housing, traffic safety, police and fire protection, health care and schools.*

9
10 *(2) The Council may issue a site certificate for a facility that would produce power from*
11 *wind, solar or geothermal energy without making the findings described in section (1).*
12 *However, the Council may apply the requirements of section (1) to impose conditions on*
13 *a site certificate issued for such a facility.*

14 ***

15 **Findings of Fact**

16 The Council’s Public Services standard requires the Council to find that the facility, with
17 proposed changes, is not likely to result in significant adverse impacts on the ability of public
18 and private service providers to supply sewer and sewage treatment, water, stormwater
19 drainage, solid waste management, housing, traffic safety, police and fire protection, health
20 care, and schools. Pursuant to OAR 345-022-0110(2), the Council may issue a site certificate for
21 a facility that would produce power from wind energy without making findings regarding the
22 Public Services standard; however, the Council may impose site certificate conditions based
23 upon the requirements of the standard.

24
25 In accordance with OAR 345-001-0010(59)(b) and consistent with the study area boundary, the
26 analysis area for potential impacts to public services from construction and operation of the
27 facility, with proposed changes, is defined as the area within and extending 10-miles from the
28 site boundary. On July 11, 2019, the Columbia County Planning Department submitted a letter
29 on the record stating that the *Request for Amendment 11* had included accurate findings of fact
30 on all relevant sections of the Columbia County Zoning Ordinance and the Columbia County
31 Comprehensive Plan, and made no comment regarding any potential issues to public services.⁶⁰

32
33 **III.M.1 Sewer and Sewage Treatment;**

34 In the Final Order on the Application, the Council found that the construction and operation of
35 the energy facility would not result in any significant adverse impact on the ability of local
36 sewage collection and treatment systems to serve their other users.⁶¹

37
38 Operation of the proposed BESS would not use water or generate wastewater; however, some
39 sewage is expected to be generated by construction workers on site during construction. In
40 section 8.12.1 of *Request for Amendment 11*, the certificate holder explains that the facility is
41 equipped with an engineered septic system which can accommodate 500 gallons of wastewater

⁶⁰ Columbia County Planning Department, Comment Letter, July 11, 2019. See Attachment B to this [DPO Order](#).

⁶¹ p. 103-104

1 per day. The certificate holder proposes that this system will be sufficient to accommodate
2 temporary needs of the 10 to 20 additional employees that will be on site during construction.
3 The certificate holder proposes that it, if needed, it will utilize contractor provided chemical
4 toilets as required by existing site certificate condition D.13(1).
5

6 Because the existing facility systems are expected to accommodate the wastewater generating
7 during construction and operation of the proposed BESS, and existing site certificate conditions
8 further reduce the potential for impacts on public sewer and sewage treatment facilities, the
9 Department recommends that addition of the proposed BESS will not alter the basis for the
10 Council's previous findings.

11 **III.M.2 Water**

12 In the Final Order on the Application, the Council found that construction and operation of the
13 facility would not result in any significant adverse impact on the ability of the local water
14 system to serve its other users.
15

16
17 In Section 8.12.2 of *Request for Amendment 11*, the certificate holder explains that water for
18 the facility is currently obtained from the facility's intake structure at a permitted point of
19 diversion on the Bradbury Slough. The certificate holder proposes that the water amounts
20 needed for the construction of the proposed BESS, including water for dust suppression, are
21 expected to be minimal and are not expected to exceed the water supply available under the
22 certificate holder's existing water right. In addition, the certificate holder explains that no water
23 will be needed on an ongoing basis for operations because the BESS will not increase the
24 number of permanent employees at the site. If a water-based fire suppression system is
25 installed for the proposed BESS, the certificate holder explains that the necessary water would
26 be obtained in a single withdrawal from the permitted point of diversion under the certificate
27 holder's existing water right, and would not increase demand on an ongoing basis.
28

29 Because the water needed for the construction and operation of the proposed BESS is not
30 expected to exceed the amount available under the facility's existing water right, the
31 Department recommends that the addition of the proposed BESS will not alter the basis for the
32 Council's previous findings.
33

34 **III.M.3 Stormwater drainage**

35 The Council did not include findings specific to the impact of the facility on the ability of the
36 local stormwater drainage system to provide services in discussions of the Public Services
37 Standard included in previous Orders. The certificate holder similarly did not include its analysis
38 of the impact of the proposed BESS on the local stormwater system in its discussion of the
39 public services standard in *Request for Amendment 11*. All stormwater runoff from the facility is
40 contained and treated onsite. The facility is within the Beaver Drainage District, and is
41 protected by a levee system.
42

43 The Council has previously imposed conditions related to stormwater management which are
44 relevant to this standard. Existing Site Certificate Condition D.14(4) requires all stormwater

1 runoff from roofs and paved areas at the facility to be diverted to pervious areas to percolate
2 into shallow groundwater. To prevent stormwater runoff from chemical storage, existing Site
3 Certificate Condition D.6(9) requires all outdoor spill containment areas to be designed to hold
4 the volume of precipitation that might accumulate within them during a 100-year storm event
5 in addition to a minimum 110 percent of liquids stored.

6
7 In addition to the construction and operation of the proposed BESS, the certificate holder has
8 proposed a modification of existing Site Certificate Condition D.6(7) to reflect that all fuel and
9 chemical storage will be in paved spill containment areas with a curb, or appropriately sized
10 and compatible secondary containment to allow for the use of secondary containment options
11 that do not require installation of permanent pavement. The Department recommended
12 additional edits to this condition in ~~III.D. Soil Protection: OAR 345-022-0022~~~~III.D. Soil Protection:~~
13 ~~OAR 345-022-0022~~, to ensure that secondary containment would be designed to accommodate
14 runoff that has potentially come into contact with chemicals or fuels to prevent contamination
15 of soils or groundwater.

16
17 The Department recommends that the addition of the Proposed BESS, and the proposed
18 change to condition D.6(7), will not substantially alter the stormwater runoff from the facility or
19 create new impacts to the ability of the local stormwater drainage system to serve its other
20 users.

21 **III.M.4 Solid Waste Management**

22
23 In the Final Order on the Application, the Council found that construction and operation of the
24 Facility would not have a significant adverse impact on the capacity of solid waste facilities in
25 the analysis area. Solid Waste for the facility is currently hauled to a transfer station in St.
26 Helens, where the waste is compacted before being transferred to the River Bend Landfill in
27 McMinnville, Oregon.

28
29 In Section 8.12.3 of *Request for Amendment 11*, the certificate holder explains that because the
30 BESS will be factory-built and will consist of modular components, solid waste generated during
31 construction would likely be limited to a relatively small amount of waste in the form of
32 packaging materials and construction debris (e.g., waste concrete from foundation
33 construction). Excess soil produced during construction would be either trucked offsite or
34 disposed of at the pre-approved spoils disposal area.

35
36 The certificate holder explains that operation of the BESS could produce a small amount of
37 waste in the form of batteries requiring replacement. In section 8.13 of the *Request for*
38 *Amendment 11*, the certificate holder states that it expects lithium-ion batteries to last
39 between 7 and 10 years and for flow batteries to last between 10 and 20 years. The certificate
40 holder proposes that battery components will be removed by a qualified vendor and recycled
41 or disposed of. The certificate holder has proposed changes to Site Certificate Condition D.14(2)
42 to require the segregation and recycling of lithium-ion batteries, as discussed in Section ~~III.N.~~
43 ~~Waste Minimization: OAR 345-022-0120~~~~III.N. Waste Minimization: OAR 345-022-0120~~, and the
44 certificate holder and Department have proposed amendments to Site Certificate conditions

1 D.2(5), D.3(7), and D.3(8) related to the safe handling and disposal of batteries as described in
2 section ~~III.B. Organizational Expertise: OAR 345-022-0010~~~~III.B. Organizational Expertise: OAR~~
3 ~~345-022-0010~~ Additionally, because the proposed BESS is not expected to increase the number
4 of permanent employees at the facility, no additional waste is expected to be generated.
5

6 In Section 8.12.3 of *Request for Amendment 11*, the certificate holder states that materials,
7 including battery cell components, will be recycled to the extent practicable at the time of
8 retirement to be determined by the accessibility of battery recycling at the time the service is
9 needed. The certificate holder explains that retirement of the BESS will produce waste in the
10 form of materials that cannot be recycled, but that these materials will be small in comparison
11 to waste from the overall Facility.
12

13 Based on the low amounts of waste anticipated during construction, operation, and retirement
14 of the facility, the Department recommends the Council find that the addition of the proposed
15 BESS, with compliance with existing and amended site certificate conditions, is not likely result
16 in a significant adverse impact on the ability of public and private providers of solid waste
17 management to deliver services.
18

19 **III.M.5 Housing**

20 In the *Final Order on the Application*, the Council found that, although the availability of
21 permanent housing in the analysis area is limited, sufficient housing is available in the local area
22 to accommodate the construction and operation of the Facility.⁶²
23

24 In section 8.12 of Request of Amendment 11, the certificate holder explains that it estimates
25 that construction of the BESS would involve a maximum of 20 employees, and an average of 10
26 employees over a 12-month construction schedule. Operation of the proposed BESS is not
27 expected to increase the number of permanent employees at the facility.
28

29 In section 8.12.4, the certificate holder explains that in an estimated 1,586 housing units were
30 available in the communities of Prescott and Rainier in Oregon (60 units) and Kelso and
31 Longview in Washington (1,526 units) in 2017. This estimate does not appear to include housing
32 that may be available in other communities such as Clatskanie.
33

34 Due to the relatively low number of employees expected to be involved in the construction of
35 the BESS, and based on the assumption that there will be no additional permanent employees
36 at the facility, the Department recommends the Council find the that the addition of the
37 proposed BESS is unlikely to have a significant adverse impact on the availability of housing
38 within the analysis area.
39

⁶² Final Order on the Application, p. 105.

1 **III.M.6 Traffic Safety**

2 In the Final Order on the Application, the Council imposed Site Certificate Conditions D.13(2)
3 through (7) and found that, in compliance with the conditions, construction and operation of
4 the Facility would not adversely affect traffic in the analysis area.

5
6 These findings were based on temporary impacts from an estimated 350 daily trips (330 cars
7 and 20 trucks) over 24 months, and a permanent increase in traffic from about 40 daily trips on
8 an ongoing basis. In comparison, in Section 8.12.5 of *Request for Amendment 11*, the certificate
9 holder estimates that the construction of the proposed BESS will require approximately 40 total
10 trips to deliver containers, electrical equipment, and concrete to the site using the same
11 transportation and supply routes as previously approved for the facility. No permanent increase
12 in traffic is expected because operation of the proposed BESS is not expected to increase the
13 number of permanent employees at the facility, and will not require the ongoing, regular
14 restocking of supplies or removal of waste products.

15
16 Due to the relatively low number of vehicle trips expected to be involved in the construction of
17 the BESS, and based on the assumption that there will be no additional permanent employees
18 at the facility, the Department recommends the Council find that the addition of the
19 proposed BESS, in compliance with existing Site Certificate Conditions D.13(2) through D.13(7)
20 and the Amended Traffic Improvement Agreement, is unlikely to alter the basis for the Council's
21 previous findings.

22
23 **III.M.7 Police Protection**

24 In the Final Order on the Application, the Council found that the construction and operation of
25 the Facility would not place significant additional demand on local police protection services.⁶³

26
27 In section 8.12.6 of *Request for Amendment 11*, the certificate holder explains that the
28 Columbia County Sherriff's Department and Oregon State Police will continue to provide the
29 facility with first-response protection. There may be a small temporary increase in demand for
30 police services during construction; however, because the proposed BESS would be located
31 inside multiple layers of security as described in section ~~II.A. Requested Amendment~~
32 ~~Requested Amendment~~, and there are not expected to be additional permanent employees at
33 the facility, no permanent increase in demand for police services is expected.

34
35 Because no permanent increase in demand for police services is expected, the Department
36 recommends the Council find that the addition of the proposed BESS does not alter the basis
37 for the Council's previous findings.

38
39 **III.M.8. Fire Protection**

40 In the *Final Order on the Application*, the Council found that construction and operation of the
41 Facility would not significantly affect the Clatskanie Rural Fire Department's ability to provide

⁶³ Final Order on the Application, p. 112.

1 fire protection service within the analysis area, and imposed Conditions D.13(8), (9), and (10)
2 related to Fire Protection Services.⁶⁴

3
4 In section 8.12.7 of *Request for Amendment 11*, the certificate holder explains that the addition
5 of the proposed BESS could present a potential fire hazard at the facility if lithium-ion batteries
6 are selected. While not specifically addressed in the Request, a 2016 hazard assessment
7 published by the Fire Protection Research Association explains that “due to the presence of a
8 flammable organic electrolyte, Li-ion batteries can experience thermal runaway reactions
9 resulting in the combustion of the flammable organics and the potential rupture of the
10 battery.”⁶⁵ However, this risk can be mitigated through facility design measures and fire safety
11 and suppression systems, as described below.

12
13 The certificate explains how fire suppression systems would be incorporated into the modular
14 battery containers if Lithium-ion battery chemistry is selected:

15
16 “Lithium-ion battery systems are designed to prevent fire by detailed electronic monitoring
17 of battery function, so that the electrical connection to the batteries will be shut down if
18 battery function or temperature is outside of the allowable operating range, and operators
19 will be alerted to respond to anomalies before they become unsafe. In the unlikely event
20 that a fire does occur, the systems are designed to prevent the spread of fire between
21 battery modules by virtue of their physical arrangement and by employing barriers within
22 the enclosure. Enclosures have adequate internal fire protection and temperature control to
23 contain the heat and flames. Depending on the final design of the BESS, a clean agent system
24 that disperses an inert gas that poses a low health risk to those responding to a fire will likely
25 be installed. Other possible systems include a gas-pressured deluge system or dry pipe
26 system. If selected, a gas-pressured deluge system is designed to simultaneously discharge
27 water from all sprinkler heads as soon as the system is activated. An independent detector
28 system (such as a heat detector or smoke detector) will control system activation. A dry pipe
29 system, in which the installation pipe work is permanently charged with gas under pressure
30 above the alarm valve, is often installed in cold climates where pipes could freeze. In such a
31 system, the gas pressure drops when a sprinkler head opens, allowing the dry pipe valve to
32 open and admit water to the system.”

33
34 The certificate holder explains that a flow-battery system would also have a fire suppression,
35 but since most flow-battery chemistries utilize a nonflammable electrolyte, they require a
36 less complex suppression systems. The certificate holder proposes that if flow batteries are
37 chosen, appropriate extinguishing media include water spray, alcohol-resistant foam, a dry
38 chemical, or carbon dioxide.

64 Final Order on the Application, pp. 112-113

65 Long, R.T. and Blum, A (2016), “Lithium Ion Batteries Hazard and Use Assessment - Phase III” p. 10.

1 In addition to the fire suppression system incorporated into the battery containers, the
2 certificate holder represents that it will implement the following measures if a lithium-ion
3 battery system is selected:

- 4
- 5 • The battery systems will be stored in completely contained, leak-proof modules,
6 each with a heating, ventilation, and air conditioning system; a fire detection and
7 suppression system; and an underground conduit to contain all wiring.
8
- 9 • Operations and maintenance staff will conduct frequent inspections of the battery
10 systems according to the manufacturer’s recommendations.
11
- 12 • Per Condition D.13(8), battery storage and fire protection systems will comply with
13 applicable standards specified by the Columbia County building department through
14 the permitting process, which will include the Uniform Fire Code, as amended by
15 Oregon and the National Fire Protection Association standards, and all other
16 applicable fire protection standards in effect at the time of construction.
17
- 18 • The Facility’s existing Emergency Response Plan will be modified as appropriate with
19 response procedures specific to the BESS in the event of an emergency such as a
20 fire. Updated Emergency Response Plans will be shared with the local fire protection
21 providers.
22

23 While the certificate holder proposes these measures only if a lithium-ion battery system is
24 selected, the Department recommends that they are appropriate for both lithium-ion and flow-
25 battery systems. The certificate holder explains that the proposed on-site fire protection
26 measures are consistent with battery manufacturer recommendations and with fire codes
27 applicable to battery storage systems. The Department also recommends that these measures
28 are consistent with requirements of the Site Certificate, with the exception that there is
29 currently no requirement for the certificate holder to share its emergency response plans with
30 local protection providers. To document this representation, the Department recommends
31 Council impose a new condition, as follows:

32

33 D.13(12) Before beginning operation of the BESS, the certificate holder will provide
34 Emergency Response Plans for the facility, updated with response procedures specific to
35 the BESS, to the Clatskanie Rural Fire Department, the St. Helens Fire District, and the
36 Department.
37

38 The certificate holder explains that transportation of lithium-ion batteries is subject to federal
39 regulation under 49 CFR 173.185. The regulations include requirements for the prevention of a
40 dangerous evolution of heat, short circuits, and damage to the terminals, and require that no
41 battery come in contact with other batteries or conductive materials. The certificate holder
42 explains that adherence to the requirements and regulations, personnel training, safe interim
43 storage, and segregation from other potential waste streams will minimize any public hazard
44 related to transport, use, or disposal of the batteries. The Department has proposed

1 amendments to Site Certificate Condition D.2(5) to clarify the applicability of these provisions
2 to the handling, transportation, and disposal of batteries and battery wastes, as discussed in
3 Section ~~III.B. Organizational Expertise: OAR 345-022-0010~~~~III.B. Organizational Expertise: OAR~~
4 ~~345-022-0010~~.

5
6 The Department agrees that proposed on-site fire protection measures and facility design
7 features are adequate to minimize additional demand on local fire protection providers. Based
8 on the analysis above, and the Department recommends the Council find that the construction
9 and operation of the BESS, in compliance with existing, amended, and new site certificate
10 conditions, is not likely to significantly impact the ability of local fire protection service
11 providers to provide fire protection service.

12 **III.M.9 Healthcare**

13 In the *Final Order on the Application*, the Council found that the construction and operation of
14 the Facility would not adversely affect medical services in the analysis area.⁶⁶ In Section 8.12.8
15 of *Request for Amendment 11*, the certificate holder states that the facility will continue to be
16 serviced by St. Johns Medical Center in Longview, Washington, and that the Clatskanie Rural
17 Fire Department will continue to provide emergency medical services.

18
19
20 Based on the assumption that the proposed addition of the BESS will not increase the number
21 of permanent employees at the facility, and given the limited scope of construction activities
22 associated with the BESS, the Department recommends that the addition of the proposed BESS
23 will not alter the basis for Council's previous finding.

24 **III.M.10 Schools**

25 In the *Final Order on the Application*, the Council found that the construction and operation of
26 the Facility would not adversely affect school districts in the analysis area.⁶⁷ In Section 8.12.9 of
27 *Request for Amendment 11*, the certificate holder states that schools within the Clatskanie
28 School District, which serves the area the facility is located in, continue to operate below their
29 designed capacity.

30
31
32 Based on the assumption that the proposed addition of the BESS will not increase the number
33 of permanent employees at the facility, and because the presence of temporary workers is not
34 expected to impact the student population in the area, the Department recommends that the
35 addition of the proposed BESS will not alter the basis for Council's previous finding.

36 **Conclusions of Law**

37 Based on the foregoing analysis, and subject to the existing, and recommended new and
38 conditions, the Department recommends that the Council find that the facility, with proposed
39 changes, would continue to comply with the Council's Public Services standard.
40

⁶⁶ Final Order on the Application, p. 113

⁶⁷ Ibid.

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

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

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

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

(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 Waste Minimization Standard requires the Council to find that the certificate holder will minimize the generation of solid waste and wastewater, and that the waste generated would be managed to minimally impact surrounding and adjacent areas.

In Section 8.13 of *Request for Amendment 11*, the certificate holder explains that that construction of the BESS will generate solid waste including concrete waste from the construction of concrete pads for container and inverter support, erosion control materials and packaging materials. The certificate holder does not provide specific measures it will take to minimize generation of these materials; however, given the limited scope of construction required for the BESS this waste is unlikely to result in significant adverse impacts to the surrounding area as discussed in Section *III.M.4 Solid Waste Management*. The certificate holder explains that as well as a limited amount of waste from paints, adhesives, and lubricants may be generated during construction, and the contractor will be responsible for disposing of the chemicals after construction in compliance with all applicable laws and regulations, as required by Site Certificate Condition D.2(5). If excess soil is produced during construction, the certificate holder explains it would be transported offsite or disposed of at the spoils disposal area, which the Council approved in the Final Order on Request for Amendment 3.

The Certificate Holder explains that that operation of the BESS may generate waste from the repair or replacement of electrical equipment, as well as periodic replacement of the batteries. Certificate holder expects lithium-ion batteries to last between 7 and 10 years and flow-batteries to last between 10 and 20 years. Certificate holder explains that battery modules

1 would be removed and recycled or disposed by a qualified vendor as needed to keep the
2 Facility operational. The certificate holder proposes a modification to Site Certificate Condition
3 D.14(2) to address the potential recycling and disposal of lithium-ion batteries. The Department
4 has included additional editorial changes to the condition to improve clarity:

5
6 D.14(2) During construction, operation and retirement of the energy facility, the
7 Certificate Holder shall segregate all used oil;~~;~~ mercury-containing lights;~~;~~ and lead-acid,
8 lithium-ion, and nickel cadmium batteries; The Certificate Holder shall store such
9 materials on-site, and deliver such materials to a recycling firm specializing in the proper
10 disposal of such materials.

11
12 Potentially hazardous materials associated with the BESS would be the lithium battery cells if
13 selected, which could contain lithium-ion electrolyte gel or liquid. If flow batteries are selected,
14 they may contain potentially hazardous electrolyte fluid. The fire suppression system could also
15 contain hazardous fire-suppressing chemicals. Containment of leaks or spills of hazardous
16 material will be incorporated into the battery container design, and the materials would be
17 managed according to the Materials Management and Monitoring Plan required under Existing
18 Site Certificate Condition D.3(8).

19
20 Distribution transformers may contain either a natural ester or mineral oil. Oils will be managed
21 in accordance with the existing site SPCC plan discussed in Section [III.D. Soil Protection: OAR 345-](#)
22 [022-0022](#)~~[III.D. Soil Protection: OAR 345-022-0022](#)~~.

23
24 Non-hazardous materials associated with the BESS include the battery module cases, storage
25 racks, the electrical wiring used to connect the battery modules to the switchgear, up to five
26 10-foot by 40-foot metal containers, at least two transformers and one bi-directional inverter
27 for each container, one cooling system for each container, and electrical cabling to connect the
28 container systems to the transformers, inverters, and the substation. Existing Site Certificate
29 Condition D.14(1) requires the certificate holder to separate any of these materials that are
30 recyclable from the solid waste stream during construction, operation, or retirement of the
31 facility to the extent practicable.

32 **Conclusions of Law**

33
34 Based on the foregoing analysis, and subject to the existing, and recommended new and
35 conditions, the Department recommends that the Council find that the facility, with proposed
36 changes, would continue to comply with the Council’s Waste Minimization standard.

37 **III.O. Division 23 Standards**

38
39 The Division 23 standards apply only to “nongenerating facilities” as defined in ORS
40 469.503(2)(e)(K), except nongenerating facilities that are related or supporting facilities. The
41 facility, with proposed changes, would not be a nongenerating facility as defined in statute and
42 therefore Division 23 is not applicable to the facility, with proposed changes.

1 **III.P. Division 24 Standards**

2 The Council’s Division 24 standards include specific standards for the siting of energy facilities,
3 including wind projects, underground gas storage reservoirs, transmission lines, and facilities
4 that emit carbon dioxide. While some Division 24 standards are applicable to the facility in
5 general, none are applicable to the changes proposed in *Request for Amendment 11*.

6
7 **III.Q. Other Applicable Regulatory Requirements Under Council Jurisdiction**

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

15
16 **III.Q.1. Noise Control Regulations: OAR 340-035-0035**

17
18 *(1) Standards and Regulations:*

19 ***

20 *(b) New Noise Sources:*

21
22 *(B) New Sources Located on Previously Unused Site:*

23
24 *(i) No person owning or controlling a new industrial or commercial noise source located*
25 *on a previously unused industrial or commercial site shall cause or permit the operation*
26 *of that noise source if the noise levels generated or indirectly caused by that noise source*
27 *increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one*
28 *hour, or exceed the levels specified in Table 8, as measured at an appropriate*
29 *measurement point, as specified in subsection (3)(b) of this rule, except as specified in*
30 *subparagraph (1)(b)(B)(iii).*

31
32 *(ii) The ambient statistical noise level of a new industrial or commercial noise source on a*
33 *previously unused industrial or commercial site shall include all noises generated or*
34 *indirectly caused by or attributable to that source including all of its related activities.*
35 *Sources exempted from the requirements of section (1) of this rule, which are identified*
36 *in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient*
37 *measurement.*

38
39 **Findings of Fact**

40 The Department of Environmental Quality (DEQ) noise control regulations at OAR 340-035-0035
41 have been adopted by Council as the compliance requirements for EFSC-jurisdiction energy
42 facilities. The analysis area for the Noise Control Regulation is the area within and extending 1-
43 mile from the site boundary.

1 In the *Final Order on the Application*, the Council found the facility met the DEQ noise standard
 2 and imposed Site Certificate Conditions E.1.a.(1) through (5) to address noise from the facility.
 3 This finding was made following a Contested Case on the issue of noise.⁶⁸ In the *Final Order on*
 4 *Request for Amendment 7*, the Council found that the facility would continue to meet the
 5 standard with the changes to then proposed Unit 2, and imposed additional monitoring and
 6 measurement requirements through Site Certificate Conditions E.1.a(6) and (7) to ensure
 7 compliance with the standard.⁶⁹

8
 9 In section 10.1 of *Request for Amendment 11*, the certificate holder states that noise from
 10 construction of the BESS will generally be of lesser magnitude and duration than construction of
 11 noise from construction of Units 1 and 2. The certificate holder explains that noisy construction
 12 activities will be limited to daytime hours, as required by Site Certificate Condition E.1.a.(1), and
 13 that nighttime construction activities will be of limited duration and limited to operations such
 14 as wire splicing, which would not exceed the existing noise limits summarized in Table 8.

15
 16 The certificate holder explains that the operation of the proposed BESS would add system noise
 17 from components including inverters and associated HVAC systems and transformers, but that
 18 the components would emit a low level of sound compared to equipment in operation for Unit
 19 1 and 2. The certificate holder states that the entire BESS will be specified to yield a sound level
 20 of not more than 65db (A-weighted scale) (dBA) at 50 feet.

21
 22 The certificate holder proposes that operational sound levels from Unit 1, Unit 2 and the
 23 predicted noise from the BESS will not exceed the limits imposed by the DEQ rule. As evidence,
 24 the certificate holder provided the estimated values in [Table 5. BESS and Port Westward](#)
 25 [Operation Sound Levels \(L50, dBA\)](#)~~Table 5. BESS and Port Westward Operation Sound Levels~~
 26 ~~(L50, dBA)~~ which shows the predicted noise levels of the BESS added to the documented noise
 27 levels from Unit 1 and Unit 2 at residential receiver sites identified in Request for Amendment
 28 7.

29
 30 **Table 5. BESS and Port Westward Operation Sound Levels (L50, dBA)**

Site	Description	PW1 + PW2 + Ambient	BESS	PW2 + Ambient BESS + PW1 +	Noise Limit (L50, dBA)	Comply with Limit
1	18645 Hermo Road (Oregon)	34	24	34	50	Yes
2	80869 Kallunki Road (Oregon)	36	24	36	43	Yes
5	128 Kathy Road (Washington)	40	23	40	50	Yes
6	108 Kathy Road (Washington)	39	24	39	44	Yes
7	233 Eagle Crest Drive (Washington)	42	26	42	48	Yes

31
 68 Final Order on the Application, p. 139-141.

69 Final Order on Request for Amendment 7, p. 34.

1 Based on this assessment, the Department recommends Council find that operational noise
2 levels from the proposed BESS are not likely to alter the certificate holders' ability to comply
3 with OAR 340-035-0035 and existing Site Certificate Conditions E.1.a.(1) through (3) are likely
4 sufficient to address noise associated with construction of the proposed BESS.

5
6 **Conclusions of Law**

7 Based on the foregoing findings, the Department recommends that the Council find that the
8 facility, with proposed changes, is likely to continue to comply with the Noise Control
9 Regulations in OAR 340-035-0035(1)(b)(B).

10
11 **III.Q.2. Removal-Fill**

12 The Oregon Removal-Fill Law (ORS 196.795 through 196.990) and Department of State Lands
13 (DSL) regulations (OAR 141-085) require a removal-fill permit if 50 cubic yards or more of
14 material is removed, filled, or altered within any waters of the state, including, but not limited
15 to, wetlands.

16
17 The analysis area for potential impacts to wetlands and other waters of the state, as defined in
18 the project order, is the area within the site boundary.

19
20 **Findings of Fact**

21 In the Final Order on the Application, the Council directed the Department of State Lands to
22 issue a Removal/Fill Permit, provided that all unavoidable wetland impacts are fully mitigated in
23 compliance with approved mitigation plans pursuant to the conditions in this Order and the
24 Removal/Fill Permit. Taking into account mitigation, and subject to compliance with the
25 conditions of the site certificate and the permit, the Council found that the certificate holder
26 complied the State Removal/Fill Law.

27
28 The certificate holder provided an updated wetland delineation report as Attachment 6 to
29 *Request for Amendment 11*. No wetlands or waters were identified within the proposed site of
30 the BESS, or the spoils disposal area; however, a 3.09 acre palustrine emergent wetland
31 adjacent the spoils disposal area was identified. This wetland area was previously identified,
32 and in the *Final Order on Request for Amendment 3* the Council imposed Site Certificate
33 Condition E.1.b to require that the certificate holder clearly stake the wetland boundary
34 adjacent to the spoils disposal area prior to any disturbance, including disposal of soil, in the
35 spoils disposal area and that the certificate holder leave the staking in place until it has
36 completed all soil disturbing activity. This condition was intended to avoid the potential impacts
37 on the wetland from disposal of soils from construction of Units 1 and 2, and is likely to be
38 sufficient to address the potential impacts from construction of the proposed BESS.

39
40 **Conclusions of Law**

41 Based on the foregoing findings of fact and conclusions, the Department recommends that the
42 Council find that subject to compliance with existing Site Certificate Condition E.1.b, the facility,
43 with the changes proposed in *Request for amendment 11*, will continue to comply with the
44 Oregon Removal/Fill Law.

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III.Q.3. Water Rights

Under ORS Chapters 537 and 540 and OAR Chapter 690, the Oregon Water Resources Department (OWRD) administers water rights for appropriation and use of the water resources of the state. Under OAR 345-022-0000(1)(b), the Council must determine whether the facility would comply with these statutes and administrative rules. 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

In Section 10.3 of the *Request for Amendment 11*, the certificate holder explains that when the certificate holder initially obtained a site certificate the development of an onsite sewage treatment system incorporating a septic tank, dosing tank, and bottomless sand filter was considered a form of wastewater discharge that required a Water Pollution Control Facilities (WPCF) Permit from DEQ.

In the Final Order on the Application, the Council found that the facility met the requirements for a WPCF permit, and imposed two DEQ-recommended conditions related to the permit: Condition E.1.d(1) required PGE to demonstrate before beginning construction that DEQ had issued a permit allowing for on-site sanitary waste disposal and Condition E.1.d(2) requires PGE to comply with state laws and rules applicable to WPCF Permits that are adopted in the future.

The certificate holder further explains that it received a letter from DEQ in March 2014, informing the certificate holder that revisions to OAR 340-071 allowed for the termination of the WPCF permit and conversion to oversight by Columbia County provided specific requirements were met. Certificate holder provided the necessary documentation and forms to DEQ and the WPCF permit was terminated.

In *Request for Amendment 11*, the certificate holder has proposed a modification to the Wastewater Section in Section C.1.a to reflect that the septic system is now under the oversight of Columbia County. The certificate holder did not propose any modifications to the site certificate conditions related to Condition E.1.d(1) or Condition E.1.d(2).

Conclusions of Law

Based on the foregoing findings of fact, the Department recommends that the Council conclude that the changes proposed in *Request for Amendment 11* will not require changes to a groundwater permit, surface water permit, or water rights.

IV. PROPOSED CONCLUSIONS AND ORDER

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

- 1 1. The proposed facility modifications included in Request for Amendment 11 comply
2 with the requirements of the Oregon Energy Facility Siting Statutes, ORS 469.300 to
3 469.520.
- 4
- 5 2. The proposed facility modifications included Request for Amendment 11 comply
6 with the standards adopted by the Council pursuant to ORS 469.501.
- 7
- 8 3. The proposed facility modifications included in Request for Amendment 11 comply
9 with all other Oregon statutes and administrative rules identified in the project
10 order as applicable to the issuance of an amended site certificate for the facility.
- 11

12 Accordingly, the Department recommends that the Council find that the proposed facility
13 modifications included in Request for Amendment 11 of the Site Certificate for the Port
14 Westward Generating Project complies with the General Standard of Review (OAR 345-022-
15 0000). The Department recommends that the Council find, based on a preponderance of the
16 evidence on the record, that the site certificate may be amended as requested.

17

18 **Proposed Order**

19 The Department recommends that the Council issue the Eleventh Amended Site Certificate for
20 the Port Westward Generating Project as proposed in Attachment A.

21

22 **Notice of the Right to Appeal**

23

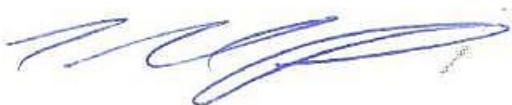
24 [Text to be added to Final Order]

25

26 Issued this ~~29th~~ 3rd day of ~~August~~October, 2019

The OREGON DEPARTMENT OF ENERGY

By: _____


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

27 **Attachments:**

- 28 Attachment A: Draft Amended Site Certificate (Red-line version)
- 29 Attachment B: Reviewing Agency Comments on preliminary Request for Amendment 11
- 30 Attachment C: ~~[Reserved for]~~ Draft Proposed Order Comments/Index
- 31 Attachment D: Draft Amended Revegetation and Noxious Weed Control Plan

Attachment A: Draft Amended Site Certificate (Red-line version)

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~~TENTH~~ELEVENTH AMENDED

SITE CERTIFICATE

FOR THE

PORT WESTWARD GENERATING PROJECT

Issued By

OREGON ENERGY FACILITY SITING COUNCIL

~~625 MARION~~550 CAPITOL STREET NE

SALEM, OR 97301-~~3737~~

~~PHONE: 503-378-4040~~

~~FAX: 503-373-7806~~

~~August xx, 2013~~October 3, 2019

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~~TENTH-ELEVENTH~~ AMENDED
SITE CERTIFICATE
FOR THE
PORT WESTWARD GENERATING PROJECT

A. INTRODUCTION

This site certificate for the Port Westward Generating Project (“PWGP or Project”) is issued and executed in the manner provided by ORS Chapter 469, by and between the State of Oregon (“State”), acting by and through its Energy Facility Siting Council (“Council”), and the Portland General Electric Company (“PGE” or “Certificate Holder”).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, which by this reference are incorporated herein: (a) the Council's Final Order in the Matter of the Application for a Site Certificate for the Port Westward Generating Project, which the Council granted on November 8, 2002; (b) the Council’s Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. One, which the Council granted on December 5, 2003; (c) the Council’s Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. Two, which the Council granted on September 24, 2004; ~~;~~ (d) the Council’s Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. Three, which the Council granted on January 28, 2005; ~~and~~ (e) the Council’s Final Order in the Matter of the Fourth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on May 19, 2006; (f) the Council’s Final Order in the Matter of the Fifth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on September 29, 2006; ~~;~~ (g) the Council’s Final Order in the Matter of the Sixth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 27, 2009; ~~;~~ (h) the Council’s Final Order in the Matter of the Seventh Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 12, 2010; (i) the Council’s Final Order in the Matter of the Eighth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on August 19, 2011; (j) the Council’s Final Order in the Matter of the Ninth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 15, 2013; ~~and~~ (k) the Council’s Final Order in the Matter of the Tenth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on August ~~23~~, 2013; ~~;~~ and (l) the Council’s Final Order in the Matter of the Eleventh Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on August 29, 2019. ~~;~~ [Amendments No. 1, 2, 3, 4, 5, 6, 7, 8, 9, ~~10~~, & ~~11~~]. ~~;~~ Collectively, we refer to the Final Orders listed in (a) through (~~k~~) as “the Orders.”

1 In interpreting this site certificate, any ambiguity shall be clarified by reference to, and in the
2 following priority: this Site Certificate, the record of the proceedings that led to the Orders, and
3 the Application for a Site Certificate for the Port Westward Generating Project. As used in this
4 Site Certificate, the “application for site certificate” or the “ASC” includes: (a) the Application
5 for a Site Certificate for the Port Westward Generating Project, which the ~~Department of~~
6 ~~Energy (“Department”)~~Certificate Holder filed on April 11, 2002; (b) the Certificate Holder’s
7 Request for First Amendment to the Site Certificate for the Port Westward Generating Project,
8 which the Council received on October 25, 2003; (c) the Certificate Holder’s Request for Second
9 Amendment to the Site Certificate for the Port Westward Generating Project, which the Council
10 received on May 7, 2004; (d) the Certificate Holder’s Request for Third Amendment to the Site
11 Certificate for the Port Westward Generating Project, which the Council received on November
12 3, 2004;~~;~~ (e) the Certificate Holder’s Request for Fourth Amendment to the Site Certificate for
13 the Port Westward Generating Project, which the Council received on January 18, 2006;~~;~~ (f) the
14 Certificate Holder’s Request for Fifth Amendment to the Site Certificate for the Port Westward
15 Generating Project, which the Council received on July 18, 2006;~~;~~ (g) the Certificate Holder’s
16 Request for Sixth Amendment to the Site Certificate for the Port Westward Generating Project,
17 which the Council received on November 7, 2008;~~;~~ (h) the Certificate Holder’s Request for
18 Seventh Amendment to the Site Certificate for the Port Westward Generating Project, which
19 the Council received on September 18, 2009;~~;~~ (i) the Certificate Holder’s Request for the Eighth
20 Amendment to the Site Certificate for Port Westward Generating Project, which the Council
21 received on November 4, 2010;~~;~~ (j) the Certificate Holder’s Request for the Ninth Amendment
22 to the Site Certificate for Port Westward Generating Project, which the Council received on
23 October 30, 2012;~~;~~ ~~and~~ (k) the Certificate Holder’s Request for the Tenth Amendment to the
24 Site Certificate for Port Westward Generating Project, which the Council received on May 28,
25 2013; ~~and~~ (l) the Certificate Holder’s Request for the Eleventh Amendment to the Site
26 Certificate for Port Westward Generating Project, which the Council received on ~~April xx~~ July 12,
27 2019. [Amendments 1 through ~~10~~11].
28

29 The terms used in this Site Certificate shall have the same meaning set forth in ORS 469.300,
30 469.503(2)(e) and ~~Oregon Administrative Rules (OAR)~~ 345-001-0010, except where otherwise
31 stated or where the context clearly indicates otherwise.
32

33 **B. SITE CERTIFICATION**

34
35 1. To the extent authorized by State law and subject to the conditions set forth herein,
36 the State approves and authorizes the Certificate Holder to construct, operate and retire
37 a natural gas-fired, ~~combined cycle combustion turbine energy facility~~ power plant, together
38 with
39 certain related or supporting facilities, at the site as described in Section C of this Site
40 Certificate, near Clatskanie, Oregon. ORS 469.401(1). [Amendment 11]
41

42 2. This site certificate shall be effective (1) until it is terminated pursuant to OAR 345-027-0110
43 or the rules in effect on the date that termination is sought, or (2) until the Site Certificate is

1 revoked pursuant to ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on
2 the date that revocation is ordered. ORS 469.401(1).

3
4 3. This Site Certificate does not address, and is not binding with respect to, matters that were
5 not addressed in the ~~Council's Final Orders, as amended~~. These matters include, but are not
6 limited to: building code compliance, wage, hour and other labor regulations, local government
7 fees and charges, and other design or operational issues that do not relate to siting the Project;
8 and permits issued under statutes and rules for which the decision on compliance has been
9 delegated by the Federal government to a state agency other than the Council. ORS 469.401(4)
10 and 469.503(3). [Amendment 11]

11
12 4. Both the State and the Certificate Holder shall abide by local ordinances and state law and
13 the rules of the Council in effect on the date this Site Certificate is executed. In addition, upon a
14 clear showing of a significant threat to the public health, safety or the environment that
15 requires application of later-adopted laws or rules, the Council may require compliance with
16 such later-adopted laws or rules. ORS 469.401(2).

17
18 5. For a permit, license or other approval addressed in and governed by this Site Certificate, the
19 Certificate Holder shall comply with applicable state and federal laws adopted in the future to
20 the extent that such compliance is required under the respective state agency statutes and
21 rules. ORS 469.401(2).

22
23 6. Subject to the conditions herein, this Site Certificate binds the State and all counties, cities
24 and political subdivisions in this state as to the approval of the site and the construction,
25 operation and retirement of the Project as to matters that are addressed in and governed by
26 this Site Certificate. ORS 469.401(3).

27
28 7. Each affected state agency, county, city and political subdivision in Oregon with authority to
29 issue a permit, license or other approval addressed in or governed by this Site Certificate shall,
30 upon submission of the proper application and payment of the proper fees, but without
31 hearings or other proceedings, issue such permit, license or other approval subject only to
32 conditions set forth in this Site Certificate. ORS 469.401(3).

33
34 8. After issuance of this Site Certificate, each state agency or local government agency that
35 issues a permit, license or other approval for the Project shall continue to exercise enforcement
36 authority over such permit, license or other approval. ORS 469.401(3).

37
38 9. After issuance of this Site Certificate, the Council shall have continuing authority over the site
39 and may inspect, or direct the Department to inspect, or request another state agency or local
40 government to inspect, the site at any time in order to assure that the Project is being operated
41 consistently with the terms and conditions of this Site Certificate. ORS 469.430.

1 10. The Certificate Holder may develop the energy facility in two phases. Phase 1 would consist
2 of the southernmost generating unit (“Unit 1”), including one combustion turbine generator,
3 heat recovery steam generator, steam generator, one step-up transformer bank, auxiliary
4 transformer, and cooling tower. Phase 1 would also include all ~~of the~~ energy facility
5 components ~~common to the two units~~ and ~~the~~ related or supporting facilities common to the
6 two units. Phase 2 would consist of the northernmost generating unit (“Unit 2”) and its
7 associated facilities. All conditions of this Site Certificate apply equally to Phase 1 and Phase 2,
8 unless a condition specifies different obligations for Phase 1 or Phase 2. [Amendments No. 1, 3
9 & 11]

12 C. SITE DESCRIPTIONS

14 C.1. FACILITY

16 C.1.a. Major Structures and Equipment

18 **Major Structures and Equipment.** The net electric power output of the energy facility will be
19 about 650 MW comprised of base load generation, power augmentation (i.e., duct burning),
20 and non-base load generation. ~~+~~ The power augmentation and non-base load generation
21 provide flexible peaking, load-following, and wind integration services that are needed to
22 maintain a reliable and stable utility system. [Amendment No. 7 & 11]

24 Unit 1 of the energy facility will consist of one heavy-duty frame-type combustion turbine
25 generator (Mitsubishi G Class), one heat recovery steam generator (“HRSG”), and one steam
26 turbine. It will burn natural gas in the combustion turbine and duct burners. Expanding gases
27 from combustion will turn the rotor within the turbine that is connected to an electric
28 generator. The hot gases exhausted from the combustion turbine and duct burners will be
29 used to raise steam in the HRSG. Steam from the HRSG will be expanded through the steam
30 turbine, driving its own electric generator. [Amendments No. 1, 7 & 11.]

32 For Unit 1, the combustion turbine will be housed in a turbine building that provides thermal
33 insulation, acoustical attenuation and fire extinguishing media containment. The turbine
34 building, occupying a footprint measuring about 150 feet by 250 feet and standing about 90
35 feet high, will also house the steam turbine generator, condenser and
36 balance of plant equipment. -The enclosure will allow access for routine inspection and
37 maintenance. -The administration building, occupying a footprint measuring about 110 feet by
38 140 feet and standing about 30 feet high, includes the control room and administrative offices.
39 [Amendments No. 7 & 11]

41 For Unit 1, the HRSG will occupy a footprint measuring about 50 feet by 150 feet and will stand
42 about 110 feet high. A stack will be provided for the HRSG. The stack will be about 36 feet in
43 diameter and 200 feet high. [Amendment No. 7]

1
2 For Unit 2, ~~aeroderivative combustion turbine~~reciprocating internal combustion generators will
3 be equipped with outdoor enclosures with thermal insulation, acoustical attenuation and fire
4 extinguishing media containment. ~~Reciprocating engine~~Unit 2 generators will be housed in an
5 engine building, occupying a footprint measuring up to 100 feet by 500 feet and standing about
6 30 to 40 feet high. [Amendments No. 7 & 11]

7
8 Six transformers will step-up the generator voltages to the substation voltage of 230 kilovolts
9 (“kV”). Two auxiliary transformers will supply power for plant auxiliary loads. [Amendments No.
10 1 & 7]

11
12 Two mechanical-draft cooling towers will be used to remove the waste heat from the main
13 condenser and the plant auxiliary heat exchangers. The cooling towers and circulating water
14 pumps will cover an area of about 75 feet by 650 feet and will stand about 50 feet high.
15 [Amendment No. 7]

16
17 A switchyard or dead-end transmission structure will interconnect the plant’s output to the
18 230-kV transmission network. The switchyard footprint will measure about 300 feet by ~~500~~550
19 feet. [Amendment No. 1 & 11]

20
21 An auxiliary boiler will supply steam for plant start-ups and short duration shut-downs. The
22 auxiliary boiler will be fueled with natural gas. [Amendment No. 3]

23
24 Additional facilities will include: a plant services/warehouse building, a boiler feed pump
25 building; a fire water pump building; a water treatment building; a clarifier; a settling basin; a
26 condensate tank, ~~a two~~two fire water/service water storage tanks and ~~two~~ demineralized water
27 storage tanks (~~440880~~440,880,000 gallon and 1,100,000 gallon capacity respectively); lubricating oil
28 tanks; a natural gas metering station; natural gas compressor stations with electric compressors
29 of 1,000 to 7,000 horsepower total, enclosed in buildings with acoustical insulation; and,
30 aqueous ammonia storage tanks (each with up to 70,000-gallon capacity and equipped with
31 containment). [Amendments No. 1, 7 & ~~7~~11]

32
33 Natural gas will not be stored at the energy facility site. Diesel fuel for the fire pumps and
34 reciprocating engine micro-pilot systems will be stored in aboveground tanks. Water treatment
35 chemicals will be stored in permanent aboveground storage tanks or portable plastic tanks
36 (totes). To prevent storm water runoff from chemical storage, all fuel and chemical storage will
37 be inside buildings or under cover in paved areas with a curb, or in appropriately sized and
38 compatible secondary containment. All individual spill containment areas will be designed to
39 hold at least 110 percent of the volume of liquids stored within them.- [Amendments No. 7 &
40 11]

41
42 A complete fire protection system will be installed within the buildings and yard areas at the
43 energy facility site. The system will be designed to meet the requirements of the Uniform Fire

1 Code, as amended by Oregon and the National Fire Protection Association, and all other
2 applicable fire protection standards. The fire protection system will include a fire water system,
3 a dry chemical extinguishing system, a carbon dioxide (“CO2”) extinguishing system, and
4 portable fire extinguishers. The road system within the energy facility site will be designed for
5 access by large trucks needed for equipment and material deliveries. The minimum turning
6 inside radius for roads will be 40 feet.

7
8 The fire water system will include a fire water supply loop, fire hydrants, sprinkler systems, and
9 hoses placed at appropriate locations. Reserved capacity ~~in the of~~ 180,000-gallons within the
10 Unit 1 fire water/service water storage tank and 400,000 gallons in the Unit 2 fire water tank
11 (total 580,000 gallons) will serve as the firewater source. [Amendment No. 11]

12
13 The combustion turbine enclosures will be protected by foam or CO2 systems. If the systems
14 were to activate, an alarm will sound and/or a visual indicator will light up on the gas turbine
15 control panel.

16
17 Portable fire extinguishers will be placed at key locations within the energy facility site. The
18 type and number of portable fire extinguishers will conform to applicable code requirements.

19
20 The Certificate Holder may develop the whole facility at the same time or it may develop only
21 one of the generating units and the related or supporting facilities (“Phase 1”) or the two units
22 of the energy facility in two distinct phases (“Phase 1” and “Phase 2”). As referred to in this Site
23 Certificate, the Certificate Holder would develop Phase 1 first if it develops the energy facility in
24 phases. Phase 1 would consist of the southernmost generating unit (“Unit 1”), including a
25 combustion turbine generator, heat recovery steam generator, steam generator, one step-up
26 transformer bank, auxiliary transformer, and cooling tower. Phase 1 would also include all of
27 the energy facility components ~~common to the two units~~ and ~~the~~ related or supporting facilities
28 common to the two units. [Amendments No. 1, 3 & 311]

29
30 **Output.** The net electric power output of the energy facility will be up to 650 MW, comprised of
31 base load generation, power augmentation (i.e. duct burning), and non-base load generation.
32 The power augmentation and non-base load generation provide flexible peaking, load-
33 following, and wind integration services that are needed to maintain a reliable and stable utility
34 system. [Amendments No. 1, 3 & 7]

35
36 The Certificate Holder proposes to operate Unit 1 with power augmentation technologies for
37 3,000 hours annually on average. The Certificate Holder proposes to operate Unit 2 as a non-
38 base load power plant. [Amendments No. 1,3 & 7]

39
40 **Fuel Use.** The energy facility will use natural gas as the only fuel to power the turbines, the
41 reciprocating engines, and the power augmentation technologies. It will use up to
42 approximately 4,700 MMBtu per hour of natural gas at full load with the duct burners in
43 operation at the average annual site condition. [Amendments No. 1, 3, 7 & 711]

1
2 **Water Use.** The energy facility will obtain water to generate steam and to cool the steam
3 process from an existing PGE intake structure on the Bradbury Slough of the Columbia River.
4 For Unit 1, the Certificate Holder obtained a permanent transfer of 5.4 cfs of a water right
5 associated with PGE’s Trojan Nuclear Plant, Certificate No. 81969. -For Unit 2, PGE will obtain a
6 permanent transfer of an additional 3.0 cfs under the same water right.¹ [Amendments No. 1, 3
7 &7]
8

9 Average water demand over at the energy facility will be about 2,800 gallons per minute
10 (“gpm”), or 4.03 -million gallons per day (“gpd”). Peak water demand will be about 3,770 gpm,
11 5.4 million gpd, or 8.4 cubic feet per second (“cfs”). [Amendments No.1, 3 & 7]
12

13 PGE owns and operates an existing intake structure on the Bradbury Slough, which will be the
14 authorized point of diversion for surface water rights transferred for use at the energy facility
15 site. To serve the energy facility, PGE will place additional pumps within the existing intake
16 facility. PGE will employ fish screens compliant with National Marine Fisheries Service (“NMFS”)
17 screening criteria and Oregon Department of Fish and Wildlife (“ODFW”) criteria. [Amendments
18 No. 1& 7]
19

20 **Wastewater.** Process blowdown is washdown water, filter backwash or other non-sanitary
21 liquid waste produced within the energy facility. The average volume of process blowdown for
22 both units combined will be about 30 gpm. Cooling system blowdown is water withdrawn from
23 the cooling system to control the buildup of dissolved salts. The average volume of cooling
24 system blowdown for both units combined will be about 970 -gpm, but it could vary depending
25 on the quality of the river water supply. The energy facility will discharge its process and cooling
26 system blowdown to the Columbia River under a National Pollution Discharge Elimination
27 System (“NPDES”) permit ~~that issued to~~ the Port of ~~St. Helens~~Columbia County ~~has requested~~
28 ~~from DEQ.~~ [Amendments No. 1, 7 & 711].
29

30 The Certificate Holder will discharge sanitary sewage to an engineered septic tank and drain
31 field at a rate of about 500 gallons per day, ~~as permitted by a Water Pollution Control Facilities~~
32 ~~permit under the oversight of Columbia County.~~ The Certificate Holder will route storm water
33 from roofs and paved areas to pervious areas to percolate into the shallow groundwater.
34 [Amendment No. 11]
35

36 C.1.b. Related or Supporting Facilities

37

38 The energy facility will include the following related or supporting facilities:
39

40 **Natural Gas Pipelines.** Natural gas will fuel the combustion turbine generators, reciprocating
41 engines, and duct burners. The energy facility will be served by the Kelso-Beaver Pipeline, an

1 WRD will issue the transferred water right a new number, replacing #81969
~~Tenth-Eleventh~~ Amended Site Certificate - DRAFT
Port Westward Generating Project
~~August XX, 2013~~October 3, 2019

1 existing FERC-regulated interstate pipeline with a current capacity of ~~193,000~~200,913
2 decatherms per day. PGE owns the pipeline jointly with two other parties. To create the
3 additional capacity that will be required to serve the energy facility, PGE will add 1,000 to 7,000
4 compressor horsepower to the Port Westward site and/or up to 8,000 compressor horsepower
5 to the Kelso-Beaver Pipeline. All work on the existing pipeline will be subject to FERC approval.
6 The addition of compressor horsepower is intended to ensure 300 to 1000 psig gas pressure at
7 the Port Westward Industrial Area with total capacity of 310 million standard cubic feet/day.
8 [Amendments No. 1, 7 & 711]

9
10 The interconnecting pipeline, about 18 inches in diameter, between the existing Kelso-Beaver
11 Pipeline and the energy facility will be about 1,000 feet long and will be installed below grade
12 with appropriate cathodic protection.

13
14 In addition, the facility will include as a related or supporting facility a secondary natural gas
15 pipeline that will connect the energy facility to an extension of the existing 20-inch NW Natural
16 Beaver Lateral. The connecting pipeline will be approximately 2,000 feet long and about 12
17 inches in diameter. The new pipeline will be installed below grade with appropriate cathodic
18 protection. The new pipeline will be owned and operated by NW Natural. [Amendment No. 5]

19
20 **Water Supply Pipeline.** Water supply for the energy facility will be drawn from Bradbury Slough
21 at about River Mile 53.8 of the Columbia River from an existing PGE intake facility for the PGE
22 Beaver Generating Plant. The pump capacity of the existing intake facility will be expanded. No
23 major structural improvements or modifications to the intake facility will be required. However,
24 PGE will upgrade the fish screens to comply with NMFS and ODFW criteria ~~regardless of~~
25 ~~whether it builds the Port Westward Generating Project~~. The Certificate Holder will install a
26 water supply pipeline about 20 inches in diameter and 6,000 feet long to convey water from
27 the intake facility to the energy facility. The water supply pipeline will traverse upland areas and
28 will avoid wetlands. [Amendment No. 1 & 11]

29
30 **Chlorination and Electrical Control Buildings.** Two small structures will be constructed on
31 upland south of the intake facility. One structure, with a footprint of about 600 square feet, will
32 be for chlorination. The other structure, with a footprint of about 150 feet, will be for electrical
33 control. Underground lines in a 25-foot wide corridor will connect these structures to the intake
34 structure. [Amendment No. 3]

35
36 **Wastewater Pipeline.** Process and cooling wastewater discharged from the energy facility will
37 be collected in a settling basin and returned to the Columbia River about one-half mile
38 northwest of the energy facility, pursuant to the ~~Port of St. Helens'~~ NPDES permit issued to the
39 Port of Columbia County. [Amendment No. 1 & 11]

40
41 Battery Energy Storage System (BESS). The certificate holder will construct up to 6 MW of battery
42 energy storage as a related or supporting facility to Unit 2. The BESS will be factory built with
43 batteries, enclosures, power conversion systems (inverters), an interconnection system, and

1 step-up transformers. The point of interconnect for the BESS will be the switchgear in the
2 existing switchyard. [Amendment No. 11]

3
4 **Utility Lines Between the Energy Facility Site and the PGE Beaver Generating Plant.** The
5 Certificate Holder will construct water, backup electricity and communications lines between
6 the existing PGE Beaver Generating Plant and the energy facility. The Certificate Holder will
7 install the lines below ground within existing roadways. Potable water may be conveyed to the
8 energy facility in a pipeline from the potable water storage tank located in the vicinity of the
9 PGE water intake facility that currently serves the PGE Beaver Generating Plant. The potable
10 water pipeline will be about two inches in diameter. The Certificate Holder will install the
11 potable water line underground. The potable water line will join the energy facility's water
12 supply pipeline corridor at their intersection as shown on revised Figure B-2. [Amendment No.
13 1]

14
15 The Certificate Holder may also construct a demineralized water pipeline about six inches in
16 diameter from the PGE Beaver Generating Plant to the energy facility. If the Certificate Holder
17 constructs the demineralized water pipeline, it will not construct a water treatment building as
18 part of the energy facility. The Certificate Holder will install a backup 13.8 kV electrical
19 distribution line and a communications line in a conduit from the PGE Beaver Generating Plant
20 to the energy facility. The demineralized water line, communications line, and backup electricity
21 lines will be about 1,-200 feet long, and the portion of the potable water line between the
22 potable water storage tank and the water supply pipeline corridor will be about 1,700 feet long
23 [Amendments No. 1 & 3]

24
25 **Temporary Construction Staging and Laydown Areas.** Temporary construction staging and
26 laydown areas totaling approximately 12.4 acres will be located around the energy facility site.
27 Another laydown area of about 6 acres will be located on upland south of the existing PGE
28 water intake structure. The areas will be used for storing equipment and materials and as
29 staging areas for constructing the power plant. Construction laydown and staging areas are as
30 depicted on Figure B-2 rev.1, submitted with the Fourth Request for Amendment on January
31 18, 2006. [Amendment No. 4]

32
33 In addition to the temporary construction staging and laydown areas approved through RFA #4
34 and through the Change Order issued April 29, 2013, which allows the Certificate Holder to use
35 a 9.13-acre graveled area within the fence line of the adjacent Beaver Generating Plant for
36 laydown and staging area used in the construction of Unit 2, the Certificate Holder is authorized
37 to use an additional approximately 10.9 acres for temporary laydown, as depicted in Figures 1-3
38 of the Final Order approving Amendment #10. Specifically, the previously approved laydown
39 area north of the energy facility site is expanded by approximately 1.9 acres; the previously
40 approved laydown area to the south, in the vicinity of the water intake structure, is expanded
41 by approximately 5.7 acres; and the Certificate Holder is authorized to use approximately 3.3
42 acres within the fence line of the Beaver Generating Plant. [Amendment No. 10]

1 **Spoils Disposal Area.** Excess soils from construction at the energy facility site will be spread
2 across the spoils disposal site of about 11.6 acres, which will be located southeast of the PGE
3 Beaver Generating Plant. [Amendment No. 3]-
4

5 **Electric Transmission Line.** The energy facility will deliver electric power to the regional grid by
6 means of a new transmission line consisting of one 230 kV circuit on monopole towers (up to
7 120 feet high) routed along existing power line easements. There ~~are~~were two transmission
8 line alternatives routes under consideration, with two other short alternative segments in the
9 vicinity of the BPA Allston Substation:
10

11 Alternative One. The first alternative will entail routing the transmission line from the energy
12 facility to the Bonneville Power Administration (“BPA”) Allston Substation near Alston, Oregon
13 (a distance of about 10 miles).
14

15 Alternative Two. The second alternative will entail routing the transmission line from the
16 energy facility to the PGE Trojan Substation near Goble, Oregon (a distance of about 20 miles).
17

18 PWGP and the Summit Project present a unique situation regarding the transmission lines for
19 their facilities. The two proposed energy projects will be located close to each other and will
20 use the same existing transmission corridor and the same towers from Port Westward to the
21 vicinity of the BPA Allston Substation, Alternative One. The towers will be double-circuited, with
22 PWGP on one side and the Summit Project on the other.
23

24 The Portland General Electric Transmission Group will build the transmission lines for either or
25 both projects, depending on which energy facilities are eventually constructed. The
26 transmission line for each project is a related or supporting facility for that project, and
27 therefore, must be built to Council standards. However, because the Council is reviewing the
28 applications for both projects simultaneously, because they will use the same towers, and
29 because the same company will build and operate the transmission lines, the Council has
30 consolidated the reviews within the PWGP proceeding and is placing conditions for the
31 transmission lines in the site certificate for the Port Westward Generating Project.
32

33 Some conditions account for the possibility that the Certificate Holder may construct the Port
34 Westward to BPA Allston Substation Transmission Line separately from constructing the energy
35 facility. Additionally, if the Certificate Holder for PWGP does not construct the energy facility
36 within the time specified in its Site Certificate or if it terminates its Site Certificate, the Council
37 intends that the Certificate Holder of the Summit Project must amend its Site Certificate to
38 include the 230 kV transmission line from the Summit Project to the BPA Allston Substation.
39

40 **C.2. LOCATION OF THE FACILITY**

41 C.2.a. The Energy Facility Site 42 43

1 The energy facility will be located about seven miles by road northeast of the city of Clatskanie
2 in Columbia County, Oregon. The energy facility site will be located on an approximately 852-
3 acre parcel leased to PGE by the Port of St. Helens Columbia County in Section 15, Township 8
4 North, Range 4 West, Willamette Meridian. The energy facility site will be fenced and will
5 comprise about 26 acres of the larger parcel [Amendments No. 1, 2, 7 & 711]

6
7 Bradbury Slough of the Columbia River lies to the northeast of the energy facility site. Access to
8 the energy facility site will be by traveling about 1.5 miles north on Kallunki Road from its
9 intersection with Alston-Mayger Road. The existing PGE Beaver Generating Plant is located
10 about one-half mile southwest of the energy facility site.

11 12 C.2.b. Related or Supporting Facility Sites

13
14 **Natural Gas Pipeline Corridors.** The primary natural gas pipeline will be about 18 inches in
15 diameter and will interconnect with the existing Kelso-Beaver Pipeline about 1,000 feet west of
16 the energy facility site. The natural gas pipeline corridor will lie within the 852-acre parcel
17 leased to PGE by the Port of St. Helens Columbia County and situated within Section 15,
18 Township 8 North, Range 4 West, Willamette Meridian. [Amendment No. 11]

19
20 The secondary natural gas pipeline will be about 12 inches in diameter, extending from the
21 energy facility to an extension of the existing NW Natural Beaver Lateral, near the northeast
22 corner of the Beaver Generating Plant. The related or supporting portion of the new natural gas
23 pipeline corridor will be approximately 2,000 feet long and will lie within the 852-acre parcel
24 leased to PGE by the Port of St. Helens Columbia County and situated within Sections 15 and 16,
25 Township 8 North, Range 4 West, Willamette Meridian. [Amendments s No. 5 & 11]

26
27 **Water Supply Pipeline Corridor.** The proposed water supply pipeline will supply raw water to
28 the energy facility from the existing PGE Beaver Generating Plant water intake structure in
29 Bradbury Slough of the Columbia River. The pipeline right-of-way will be about 50 feet wide and
30 6,000 feet long, will cover an area of about 7 acres, and will lie within the 852-acre parcel
31 leased to PGE by the Port of St. Helens Columbia County and situated within Section 15,
32 Township 8 North, Range 4 West, Willamette Meridian. [Amendment No. 11]

33
34 **Chlorination and Electrical Control Buildings.** Two small structures will be constructed on
35 upland south of the existing PGE Beaver Generating Plant water intake structure in Bradbury
36 Slough. The two structures, with a combined footprint of about 750 square feet, will lie within
37 the 852-acre parcel leased to PGE by the Port of St. Helens Columbia County and situated within
38 Section 15, Township 8 North, Range 4 West, Willamette Meridian. [Amendments s No. 3 & 11].

39
40 **Wastewater Pipeline Corridor.** Water discharged from the energy facility will be returned to
41 the Columbia River about one-half mile northwest of the energy facility. The wastewater
42 pipeline corridor will be about 100 feet wide and 2,400 feet long, will cover an area of about 6
43 acres, and will lie primarily within the 852-acre parcel leased to PGE by the Port of St. Helens

1 Columbia County and situated within Section 15 and 16, Township 8 North, Range 4 West,
2 Willamette Meridian. [Amendments No. 1 & 11]

3
4 **Battery Energy Storage System**

5 The BESS will be installed within the energy facility site described in Section C.2.a. [Amendment
6 No. 11]

7
8
9 **Utility Line Corridor Between the Energy Facility Site and the PGE Beaver Generating Plant.**

10 The Certificate Holder will construct a potable water pipeline, backup electricity line,
11 communications line and possibly a demineralized water pipeline from the PGE Beaver
12 Generating Plant or the potable water tank to the energy facility site. It will install the lines a
13 minimum depth of three feet below grade in existing roadways entirely with the 825-acre
14 parcel that the Port of ~~St. Helens~~Columbia County has leased to PGE. The parcel is located
15 within Section 15 and 22, Township 8 North, Range 4 West, Willamette Meridian. [Amendments
16 No. 1 & 11]

17
18 **Temporary Construction Staging and Laydown Areas.** Temporary construction staging and
19 laydown areas totaling approximately 12.4 acres will be located around the energy facility site,
20 within the 852-acre parcel leased to PGE by the Port of ~~St. Helens~~Columbia County and situated
21 within Sections 15 and 16, Township 8 North, Range 4 West, Willamette Meridian. Another
22 laydown area of about 6 acres will be located on upland south of the existing PGE water intake
23 structure within Section 15, Township 8 North, Range 4 West, Willamette Meridian. The areas
24 will be used for storing equipment and materials and as staging areas for constructing the
25 power plant. Construction laydown and staging areas are as depicted on Figure B-2 rev.1 as
26 submitted with the Request for Fourth Amendment on January 18, 2006 [Amendments No. 4 &
27 11]

28
29 **Spoils Disposal Area.** Excess soils from construction at the energy facility site will be spread
30 across the spoils disposal site of about 11.6 acres, which will be located southeast of the PGE
31 Beaver Generating Plant, within the 852-acre parcel leased to PGE by the Port of ~~St.~~
32 ~~Helens~~Columbia County and situated within Sections 15 and 22, Township 8 North, Range 4
33 West, Willamette Meridian. [Amendments No. 3 & 11]

34
35 **Transmission Line Corridor.** The transmission line will follow one of two alternative routes:

36
37 Alternative One. Under this alternative, the energy facility will deliver electric power to the BPA
38 Allston Substation near Alston, Oregon, by means of a new 230-kV circuit on monopole steel
39 structures, except where it will have to cross the existing BPA lines. A separate 230 kV circuit
40 will carry the output of the Summit Project on the same structures, as noted above. The new
41 transmission line will be routed on an existing PGE right-of-way that is 250 feet wide, except at
42 the BPA Allston Substation where a new right-of-way may be required. The structures will be
43 placed on or near the centerline of the unused north half of the right-of-way. The transmission

1 line corridor will be about 125 feet wide and 10 miles long, will occupy an area of about 300
2 acres, and will pass through Sections 15, 22, 23, 26, 35 and 36, Township 8 North, Range 4
3 West, and Sections 31, 5, 6, 4, 3 and 10, Township 7 North, Range 3 West, Willamette Meridian.

4
5 Alternative Two. Under this alternative, the energy facility will deliver electric power to Trojan
6 near Goble, Oregon, by means of a new 230-kV circuit on monopole steel structures. Between
7 PWGP and the BPA Allston Substation, the new transmission line will be routed on an existing
8 PGE right-of-way 250 feet wide as described in Alternative One. The structures will be placed on
9 or near the centerline of the unused north half of the right-of-way. Between the BPA Allston
10 Substation and Trojan, the new transmission line will run parallel to an existing BPA
11 transmission line. This section of the transmission line corridor will be about 125 feet wide and
12 ten miles long, will occupy an area of about 300 acres, and will pass through Sections 10, 11, 15,
13 14, 23 and 24, Township 7 North, Range 3 West, and Sections 19, 30, 29, 28, 33 and 34,
14 Township 7 North, Range 2 West, and Sections 3 and 2, Township 6 North, Range 2 West,
15 Willamette Meridian.

16
17 Alternates 3 and 4. These short alternate segments are in the vicinity of the BPA Allston
18 Substation. They provide flexibility for interconnecting with the substation.

19
20 ~~Unanalyzed Options. As shown on Figure C 2 of the ASC, and in particular the enlarged detail of~~
21 ~~the BPA Allston Substation, there is a segment of Alignment 1 identified as “2nd (future)~~
22 ~~circuit.” This Site Certificate does not address that proposed segment of Alignment 1.~~

23 24 **D. COUNCIL SITING STANDARDS**

25 26 **D.1. [PLACEHOLDER]**

27 [No Conditions]

28 29 **D.2. ORGANIZATIONAL EXPERTISE**

30
31 (1) The Certificate Holder shall report to the Department of Energy (“Department”) in a
32 timely manner any change in the ownership of Portland General Electric Company
33 (“PGE”).

34
35 (2) Before beginning construction of the energy facility, the Port Westward to
36 Bonneville Power Administration (“BPA”) Allston Substation Transmission Line, or other
37 related or supporting facilities, the Certificate Holder shall identify to the Energy Facility
38 Siting Council (“Council”) whom it has chosen to act in the role of the engineering,
39 procurement and construction (“EPC”) contractor(s) for specific portions of the work.

40
41 (3) If the Certificate Holder chooses a third-party contractor to operate the facility, the
42 Certificate Holder shall submit to the Council the identity of the contractor so the
43 Council may review the qualifications and capability of the contractor to meet the

1 standards of OAR 345-0022-0010. If the Council finds that a new contractor meets these
2 standards, the Council shall not require an amendment to the Site Certificate for the
3 Certificate Holder to hire the contractor.
4

5 (4) Any matter of non-compliance under this Site Certificate shall be the responsibility
6 of the Certificate Holder. Any notice of violation issued under the Site Certificate will be
7 issued to the Certificate Holder. Any civil penalties levied shall be levied on the
8 Certificate Holder.
9

10 (5) The Certificate Holder shall contractually require ~~the any~~ EPC contractor(s), ~~and all~~
11 independent contractors, and subcontractors involved in the construction, ~~and~~
12 operation, or retirement of the facility, including contractors involved in the
13 transportation and disposal of batteries and battery wastes, to comply with all
14 applicable laws and regulations and with the terms and conditions of the Site Certificate.
15 Such contractual provision shall not operate to relieve the Certificate Holder of
16 responsibility under the Site Certificate. [Amendment No. 11]
17

18 (6) The Certificate Holder shall obtain necessary state and local permits or approvals
19 required for the construction, operation and retirement of the facility or ensure that its
20 contractors obtain the necessary state and local permits or approvals.
21

22 ~~-(7) [Deleted]. [Amendments No. 1 & 7]~~
23

24 (8) Before beginning construction of the energy facility, the Certificate Holder shall
25 deliver to the Department evidence that the Oregon Department of Environmental
26 Quality has issued to the Port of ~~St. Helens~~Columbia County a National Pollutant
27 Discharge Elimination System (“NPDES”) permit that provides for the discharge of non-
28 sanitary wastewater from the Port Westward Industrial Site, including all non-sanitary
29 wastewater produced by the energy facility. [Amendment No. 11]
30

31 (9) Before beginning construction of the energy facility, the Certificate Holder shall
32 deliver to the Department a copy of the agreement between the Certificate Holder and
33 the Port of ~~St. Helens~~Columbia County that provides for discharge of non-sanitary
34 wastewater from the energy facility by means of the NPDES permit issued to the Port of
35 ~~St. Helens~~Columbia County. [Amendment No. 11]
36

37 (10) Before beginning operation of the BESS, the certificate holder shall submit to the
38 Department, the plan or curriculum covering operation and maintenance of the BESS
39 that demonstrates certificate holder’s staff will receive adequate training to operate and
40 maintain the BESS in a manner that protects public health and safety. [Amendment No.
41 11]
42

1 **D.3. RETIREMENT AND FINANCIAL ASSURANCE**

2
3 (1) The Certificate Holder shall retire the facility if the Certificate Holder permanently ceases
4 construction or operation of the facility. The Certificate Holder shall retire the facility
5 according to a final retirement plan approved by the Council, as described in OAR 345-027-
6 0110, and prepared pursuant to Condition D.3(2).

7
8 (2) Two years before closure of the energy facility, the Certificate Holder shall submit to the
9 Department a proposed final retirement plan for the facility and site, pursuant to OAR 345-
10 027-0110, including:

11
12 (a) A plan for retirement that provides for completion of retirement within two years of
13 permanent cessation of operation of the energy facility and that protects the public
14 health and safety and the environment;

15
16 (b) A description of actions the Certificate Holder proposes to take to restore the site to
17 a useful, non-hazardous condition; and,

18
19 (c) A detailed cost estimate, a comparison of that estimate with the dollar amount
20 secured by a bond or letter of credit and any amount contained in a retirement fund,
21 and a plan for assuring the availability of adequate funds for completion of retirement.

22
23 (3) The Certificate Holder shall prevent the development of any conditions on the site that
24 would preclude restoration of the site to a useful, non-hazardous condition to the extent
25 that prevention of such site conditions is within the control of the Certificate Holder.

26
27 (4) A retirement plan that the Certificate Holder submits may provide transmission lines
28 constructed and operated under this Site Certificate remain in operation to serve other
29 energy facilities. [Amendment No. 3]

30
31 (5) The Certificate Holder shall submit to the State of Oregon, through the Council, a bond
32 or letter of credit in the amount described below, naming the State of Oregon, acting by
33 and through the Council, as beneficiary or payee [Amendments No. 3 & 7]

34
35 (a) Before beginning construction of Unit 1, the Certificate Holder submitted a bond or
36 letter of credit in the amount of \$3,698,000 (in 2004 dollars as of the fourth quarter).
37 Upon execution of the Seventh Amended Site Certificate, the Certificate Holder shall
38 adjust the amount of the bond or letter of credit to \$5,201,000 (in 1st Quarter 2010
39 dollars).-[Amendments No. 1, 3 & 7]

40
41 (b) Before beginning construction of Unit 2, the Certificate Holder shall submit a bond
42 or letter of credit in an amount equal to the sum of (i) \$5,201,000 (in 1st Quarter 2010
43 dollars) for Unit 1, plus (ii) an amount for Unit 2 determined by application of the

1 Department's Facility Retirement Cost and Estimating Guide² -subject to review and
2 approval by the Department. -[Amendments No. 3 & 7]

3
4 (c) [Deleted]. [Amendments No. 1 & 3]

5
6 (d) The form of the bond or letter of credit and identity of the issuer shall be subject to
7 approval by the Council.

8
9 (e) The Certificate Holder shall maintain a bond or letter of credit in effect at all times
10 until the energy facility or the Port Westward to BPA Allston Substation Transmission
11 Line has been retired, as appropriate.

12
13 (f) The ~~calculation of 1st quarter 2010 dollars (or 2002 dollars for purposes of any five~~
14 ~~year supplemental payments for carbon dioxide offsets for power augmentation on Unit~~
15 ~~1) present value of dollar amounts in this site certificate~~ shall be ~~made~~ calculated using
16 the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in
17 the Oregon Department of Administrative Services' "Oregon Economic and Revenue
18 Forecast," or by any successor agency (the "Index")³. If at any time the Index is no longer
19 published, the Council shall select a comparable calculation ~~of 2002, 2004 and 2010~~
20 ~~dollars~~. [Amendments No. 3, 6, and 7, & 11]

21
22 (g) The amount of the bond or letter of credit account shall increase annually by the
23 percentage increase in the Index.

24
25 (h) The Certificate Holder shall not revoke or reduce the bond or letter of credit before
26 retirement of the facility without approval by the Council.

27
28 (6) The Certificate Holder shall describe in the annual report submitted to the Council,
29 pursuant to OAR 345-026-0080, the status of the retirement fund or other instrument to
30 ensure it has adequate funds to restore the site.

31
32 (7) Before beginning construction of the energy facility or BESS, the Certificate Holder shall
33 prepare and submit to the Department a materials management and monitoring plan that
34 addresses the handling and transportation of hazardous substances, the measures it will
35 implement to prevent site contamination, and how it will document implementation of the
36 plan during construction. The materials management and monitoring plan shall be subject
37 to approval by the Department. For the purpose of this condition and Conditions D.3(8),

² The Department's Facility Retirement Cost and Estimating Guide is available from the Oregon Department of Energy

³ DAS maintains the Index and places it on line at

<https://www.oregon.gov/das/OEA/Documents/other-quarterly.xls>

<http://www.oregon.gov/DAS/OEA/docs/economic/econdata/other-quarterly.xls>

~~Tenth-Eleventh~~ Amended Site Certificate - DRAFT

Port Westward Generating Project

~~August XX, 2013~~ October 3, 2019

1 D.3(10), D.3(11), and D.3(12) below, the terms “release” and “hazardous substances” shall
2 have the meanings set forth at ORS 465.200. [Amendment No. 11]
3

4 (8) Before beginning operation of the energy facility or BESS, the Certificate Holder shall
5 prepare and submit to the Department a materials management and monitoring plan that
6 addresses the handling and transportation of hazardous substances, the measures it will
7 implement to prevent site contamination, and how it will document implementation of the
8 plan during operation. The materials management and monitoring plan shall be subject to
9 approval by the Department. [Amendment No. 11]
10

11 (9) Not later than 10 years after the date of commercial operation of Phase 1 of the energy
12 facility, and each 10 years thereafter during the life of the energy facility, the Certificate
13 Holder shall complete an independent Phase I Environmental Site Assessment of the energy
14 facility site. Within 30 days after its completion, the Certificate Holder shall deliver the
15 Phase I Environmental Site Assessment report to the Department. [Amendment No. 1]
16

17 (10) In the event that any Phase I Environmental Site Assessment identifies improper
18 handling or storage of hazardous substances or improper record keeping procedures, the
19 Certificate Holder shall correct such deficiencies within six months after completion of the
20 corresponding Phase I Environmental Site Assessment. It shall promptly report its corrective
21 actions to the Department. The Council shall determine whether the corrective actions are
22 sufficient.
23

24 (11) The Certificate Holder shall report any release of hazardous substances, pursuant to
25 DEQ regulations, to the Department within one working day after the discovery of such
26 release. This obligation shall be in addition to any other reporting requirements applicable
27 to such a release.
28

29 (12) If the Certificate Holder has not remedied a release consistent with applicable Oregon
30 Department of Environmental Quality standards or if the Certificate Holder fails to correct
31 deficiencies identified in the course of a Phase I Environmental Site Assessment within six
32 months after the date of the release or the date of completion of the Phase I Environmental
33 Site Assessment, the Certificate Holder shall submit within such six-month period to the
34 Council for its approval an independently prepared estimate of the additional cost of
35 remediation or correction.
36

37 (a) Upon approval of an estimate by the Council, the Certificate Holder shall increase the
38 amount of its bond or letter of credit by the amount of the estimate.
39

40 (b) In no event, however, shall the Certificate Holder be relieved of its obligation to
41 exercise all due diligence in remedying a release of hazardous substances or correcting
42 deficiencies identified in the course of a Phase I Environmental Site Assessment.
43

1 (13) All funds received by the Certificate Holder from the salvage of equipment and
2 buildings during retirement of the facility shall be committed to the restoration of the
3 energy facility site to the extent necessary to fund the approved site restoration and
4 remediation. [Amendment No. 11]
5

6 (14) The Certificate Holder shall pay the actual cost to restore the site to a useful, non-
7 hazardous condition at the time of retirement, notwithstanding the Council's approval in
8 the Site Certificate of an estimated amount required to restore the site.
9

10 (15) If the Council finds that the Certificate Holder has permanently ceased construction or
11 operation of the facility without retiring the facility according to a final retirement plan
12 approved by the Council, as described in OAR 345-027-0110 and prepared pursuant to
13 Condition D.3(2), the Council shall notify the Certificate Holder and request that the
14 Certificate Holder submit a proposed final retirement plan to the Department within a
15 reasonable time not to exceed 90 days.
16

17 (a) If the Certificate Holder does not submit a proposed final retirement plan by the
18 specified date or if the Council rejects the retirement plan that the Certificate Holder
19 submits, the Council may direct the Department to prepare a proposed a final
20 retirement plan for the Council's approval.
21

22 (b) Upon the Council's approval of the final retirement plan prepared pursuant to
23 subsection (a), the Council may draw on the bond or letter of credit described in
24 Condition D.3(5) and shall use the funds to restore the site to a useful, non-hazardous
25 condition according to the final retirement plan, in addition to any penalties the Council
26 may impose under OAR Chapter 345, Division 29.
27

28 (c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of
29 retirement, the Certificate Holder shall pay any additional cost necessary to restore the
30 site to a useful, non-hazardous condition.
31

32 (d) After completion of site restoration, the Council shall issue an order to terminate the
33 Site Certificate if the Council finds that the facility has been retired according to the
34 approved final retirement plan.
35

36 (16) In the event that soils are removed from the temporary laydown areas approved
37 through Amendment #10, the site certificate holder shall manage and dispose of the soil in
38 a manner consistent with the *Hazardous Materials Management and Monitoring Plan* for
39 Unit 2, and in accordance with state cleanup and solid waste statutes and rules.
40 [Amendment No. 10]
41

42 (17) Before beginning construction of the BESS, authorized by the Eleventh Amended site
43 certificate, the certificate holder shall provide updated design information including, but

1 not limited to, battery chemistry and the number and layout of modular containers,
2 inverters, and transformers for the BESS. [Amendment No. 11]

3
4 (18) Before beginning construction of the BESS, the Certificate Holder shall submit a bond or
5 letter of credit in the amount of \$136,736 (1st Quarter 2019 dollars) for a lithium-ion BESS
6 and \$637,635 (1st Quarter 2019 dollars) for a flow BESS, subject to the same requirements
7 as D.3(5)(d) through (h). [Amendment No. 11]
8
9

10 11 **D.4. LAND USE**

12
13 (1) Before beginning construction of the energy facility, the Certificate Holder shall
14 submit a landscaping plan for the energy facility to Columbia County as part of its
15 building permit application for the energy facility. The landscaping plan shall be subject
16 to County approval, provided that the plan is consistent with this Site Certificate and the
17 Final Order. The Certificate Holder shall implement the landscaping plan.
18

19 (2) Before beginning construction of the energy facility, the Certificate Holder shall
20 submit a site plan to Columbia County as part of its building permit application. Before
21 beginning construction of the BESS, the Certificate Holder shall submit an updated site
22 plan to Columbia County to reflect the addition of the BESS as a related or supporting
23 facility. [Amendment No. 11]
24

25 (3) Before beginning construction of the energy facility, the Certificate Holder shall
26 submit to Columbia County as part of its building permit application for the energy
27 facility a final parking lot plan that complies with Section 1400 of the Columbia County
28 Zoning Ordinance. The parking plan shall be consistent with this Site Certificate and
29 Attachment D of the Final Order. The Certificate Holder shall implement the parking lot
30 plan.
31

32 (4) Before beginning construction of the energy facility or the Port Westward to BPA
33 Allston Substation Transmission Line, as appropriate, the Certificate Holder shall apply
34 for and obtain all appropriate land use permits from Columbia County and the City of
35 Rainier.
36

37 (5) Before beginning construction of the energy facility, the Certificate Holder shall enter
38 into a written contract with Columbia County that recognizes the rights of land owners
39 who are adjacent to and nearby the corridor for the transmission line from the BPA
40 Allston Substation to the Trojan Nuclear Plant where it crosses PF-76 and FA-19 zones to
41 conduct forest operations consistent with the Forest Practices Act and Rules for uses
42 authorized in OAR 660-006-0025, subsections (4)(e), (m), (s), (t), and (w).
43

1 **D.5. STRUCTURAL STANDARD**
2

3 (1) The Certificate Holder shall design, engineer and construct the facility to avoid
4 dangers to human safety presented by seismic hazards affecting the site that are
5 expected to result from all maximum probable seismic events. In no event shall the
6 recommended seismic design parameters be any less than those prescribed by the
7 Oregon Uniform Building Code. As used in this condition, "seismic hazard" includes
8 ground shaking, landslide, liquefaction, lateral spreading, tsunami inundation, fault
9 displacement, and subsidence.

10
11 (2) If the Certificate Holder does not have subsurface information for design of the
12 transmission lines that is acceptable to the Department and the Oregon Department of
13 Geology and Mineral Industries ("DOGAMI"), then the Certificate Holder shall drill
14 exploratory borings at critical locations during final design of the proposed transmission
15 lines.

16
17 (3) Before beginning construction of the facility, the Certificate Holder shall provide the
18 Department and DOGAMI with a report containing results of geotechnical investigations
19 and recommendations for the design of the energy facility, transmission lines and other
20 related or supporting facilities.

21 (a) The Certificate Holder shall prepare the report consistent with the study designs
22 detailed in the Section D.5 of the Final Order and Section H.3 the Application for a
23 Site Certificate ("ASC").

24
25 (b) If DOGAMI is not able to review the reports, the Department shall arrange, in
26 consultation with DOGAMI, for an independent review of the report by a qualified
27 registered geologist.

28
29 (c) If the Certificate Holder begins construction of the Port Westward to BPA Allston
30 Substation Transmission Line before beginning construction of other parts of the
31 facility, Condition D.5(3) shall apply only to the Port Westward to BPA Allston
32 Substation Transmission Line as long as it is the only part of the facility under
33 construction.

34
35
36 (4) In addition to, or concurrent with Condition D.5(3), before beginning construction
37 within the City of Rainier's Watershed zone, the Certificate Holder shall submit to the
38 City of Rainier, the Department and DOGAMI a geotechnical report prepared by a
39 registered engineer establishing that it can safely accomplish any construction in a
40 known slide hazard area, flood hazard area, or drainage way, or on slopes exceeding 20
41 percent in that zone.
42

1 (5) If the geotechnical investigation reveals evidence that is not described in the ASC,
2 the Certificate Holder shall revise the facility design parameters to comply with
3 appropriate Uniform Building Code requirements.
4

5 (6) The Certificate Holder shall notify the Department, the State Building Codes Division
6 and DOGAMI promptly if site investigations or trenching reveals that subsurface
7 conditions differ significantly from those described in the ASC. After the Department
8 receives the notice, the Council may require the Certificate Holder to consult with
9 DOGAMI and the Building Codes Division and to propose mitigation actions.
10

11 (7) The Certificate Holder shall notify the Department, the Building Codes Division and
12 DOGAMI promptly if shear zones, artesian aquifers, deformations, or clastic dikes are
13 found at or in the vicinity of the facility site.
14

15 (8) The Certificate Holder shall design, engineer and construct the facility to avoid
16 dangers to human safety presented by non-seismic or aseismic hazards affecting the
17 site. As used in this condition, “non-seismic or aseismic hazards” includes settlement,
18 landslides, groundwater, flooding, and erosion.
19

20 (9) The secondary gas supply pipeline constructed and operated by NWN shall be
21 designed to accommodate the potential for different settlement and seismic induced
22 differential deformation, particularly where the pipeline connects to the existing supply
23 line.
24

25 (10) If additional geotechnical investigations are performed for the design of the BESS,
26 the Certificate Holder shall provide the Department and DOGAMI with a report
27 containing the results of the investigation. The report shall conform to Oregon State
28 Board of Geologist Examiners Guideline for Preparing Engineering Geologic Reports.
29 [Amendment No. 11]
30

31 **D.6. SOIL PROTECTION**

32 (1) Upon completion of construction in an area, the Certificate Holder shall use native
33 seed mixes to restore vegetation to the extent practicable and shall landscape portions
34 of the site disturbed by construction in a manner compatible with the surroundings and
35 proposed use. Conditions D.6(1) through D.6(6) shall apply to all soil disturbing
36 activities, including maintenance, repair, reconstruction, and retirement of facilities.
37 [Amendment No. 1]
38

39 (2) The Certificate Holder shall employ the following measures to control soil erosion
40 and sediment runoff by water and wind erosion:
41
42

- 1
2 (a) Avoid excavation and other soil disturbances beyond that necessary for
3 construction of the facility or confine equipment use to specific areas.
4
5 (b) Remove vegetation only as necessary.
6
7 (c) Apply water or mulch, as necessary, for wind erosion control during construction.
8
9 (d) Revegetate those construction areas that will no longer be used.
10
11 (e) Use temporary erosion and sediment control measures, such as sediment fences,
12 straw wattles, bio-filter bags, mulch, permanent and temporary seeding, sediment
13 traps and/or basins, rock check dams or gravel filter berms, and gravel construction
14 entrances, and maintain these features throughout construction and restoration to
15 reduce the potential for soil erosion and sediment runoff.
16
17 (f) Protect soil stockpiles with mulch and plastic sheeting.

18
19 (3) If excessively wet conditions occur during construction, the Certificate Holder shall
20 limit construction activities during such periods to the degree practicable in areas
21 susceptible to soil compaction.
22

23 (4) After completing construction in an area, the Certificate Holder shall monitor the
24 construction area for a period of 12 months to evaluate whether construction-related
25 impacts to soils are being adequately addressed by the mitigation procedures described
26 in the Sediment Erosion and Control Plan. It shall submit its quality assurance measures
27 to the Department for approval before beginning monitoring.
28

29 (5) After completing construction in an area, the Certificate Holder shall use the results
30 of the monitoring program in Condition D.6(4) to identify remaining soil impacts
31 associated with construction that require mitigation. As necessary, the Certificate
32 Holder shall implement follow-up restoration measures to address those remaining
33 impacts and shall report in a timely manner to the Department what measures it has
34 taken.
35

36 (6) The Certificate Holder shall remove trapped sediment when the capacity of the
37 sediment trap has been reduced by 50 percent and shall place such sediment in an
38 upland area certified by a qualified wetland specialist.
39

40 (7) The Certificate Holder shall contain all fuel and chemical storage in paved spill
41 containment areas with a curb or appropriately sized and compatible secondary
42 containment, in a manner consistent with the Hazardous Materials Management and
43 Monitoring Plan for the facility. [Amendment No. 11]

1
2 (8) The Certificate Holder shall design all ~~inside-indoor~~ spill containment areas or
3 secondary containment to hold at least 110 percent of the volume of liquids stored
4 within them. [Amendment No. 11]
5

6 (9) The Certificate Holder shall design all outdoor spill containment areas ~~located~~
7 ~~outdoors~~ or secondary containment to hold at least 110 percent of the volume of liquids
8 stored within them, together with the volume of precipitation that might accumulate
9 during the 100-year return frequency storm. [Amendment No. 11]
10

11 (10) During operation, the Certificate Holder shall minimize drift from the cooling
12 towers through the use of high efficiency drift eliminators that allow no more than
13 0.002 percent drift.
14

15 **D.7. PROTECTED AREAS**

16 [No Conditions]
17

18 **D.8. FISH AND WILDLIFE HABITAT**

19
20 (1) The Certificate Holder shall, to the extent practicable, avoid and, where avoidance is
21 not possible, minimize construction and operation disturbance to areas of native
22 vegetation and areas that provide important wildlife habitat. With respect to
23 construction of the facility, the Certificate Holder shall mitigate possible impacts to
24 wildlife by measures including, but not limited to, the following:
25

26 (a) Posting speed limit signs throughout the energy facility construction zone.
27

28 (b) Instructing construction personnel, including construction contractors and their
29 personnel, on sensitive wildlife of the area and on required precautions to avoid
30 injuring or destroying wildlife.
31

32 (c) Instructing construction personnel, including construction contractors and their
33 personnel, to watch out for wildlife while driving through the facility site, to
34 maintain reasonable driving speeds so as not to harass or strike wildlife accidentally,
35 and to be cautious and drive at slower speeds in a period from one hour before
36 sunset to one hour after sunrise when some wildlife species are the most active.

37 (d) Requiring construction personnel, including construction contractors and their
38 personnel, to report any injured or dead wildlife detected at the facility site.
39

40 (2) The Certificate Holder shall construct, operate and retire the facility to minimize
41 impacts to vegetation and habitat.
42

1 (a) The energy facility shall be located within previously disturbed Habitat Category
2 6, non-native grassland Habitat Category 4, and palustrine emergent and
3 forested/scrub-shrub wetlands Habitat Category 3.
4

5 (b) The Certificate Holder shall limit Habitat Category 3 impacts to 0.43 acres of
6 permanent impact within palustrine emergent and forested/scrub-shrub wetlands.
7

8 (3) The Certificate Holder shall site transmission towers outside wetlands and
9 waterways to the greatest extent practicable. If the Certificate Holder must site
10 transmission towers in riparian zones or wetlands, the Certificate Holder shall use a
11 monopole design for the transmission towers to minimize ground impacts and
12 vegetation control, except where it would have to cross the existing BPA lines.
13

14 (4) The Certificate Holder shall prohibit construction and maintenance equipment from
15 entering perennial and intermittent streams, except as follows:
16

17 (a) Construction equipment may cross a stream if it is dry;
18

19 (b) Construction equipment may cross streams that are not dry by using temporary
20 structures to bridge the stream in a manner that minimizes disturbance to the bed,
21 banks and water of the stream;
22

23 (c) Construction equipment may cross a wet stream if the Certificate Holder notifies
24 the Division of State Lands, the Oregon Department of Fish and Wildlife (“ODFW”)
25 and the Department of its intent to cross the stream prior to the crossing and these
26 agencies concur that the crossing is acceptable.
27

28 (A) The Certificate Holder shall return any stream bed or bank that it disturbs
29 during construction or maintenance to conditions that are comparable to pre-
30 disturbed conditions, including stabilizing the bed and banks and revegetating
31 the riparian area with appropriate plant species.
32

33 (B) The Certificate Holder shall construct wet stream crossings within the ODFW-
34 designated in-water work period.
35

36 (C) The Certificate Holder shall keep the wet stream crossing width to the
37 minimum needed.
38

39 (5) The Certificate Holder shall take advantage of existing roads to the extent
40 practicable.
41

42 (6) Before beginning construction of the energy facility or beginning construction of the
43 transmission lines, and in the appropriate season, the Certificate Holder shall conduct

1 wildlife surveys within 0.25 miles of the site to locate great blue heron rookeries. Should
2 it locate rookeries, the Certificate Holder shall consult with ODFW and the Department
3 to determine the action necessary to avoid adverse impacts. If it cannot avoid impacts,
4 the Certificate Holder shall suspend construction in the affected areas during the critical
5 nesting period of the species, as determined by the Department in consultation with
6 ODFW.

7
8 (7) The Certificate Holder will confirm breeding status and nest location of the Crims
9 Island bald eagles each year and consult with the Department and ODFW concerning the
10 need for monitoring and/or modifications to construction activities if:

11
12 a) the project scope changes in a manner that may affect the bald eagles; and/or,

13
14 b) the location(s) of bald eagle nests on Crims Island changes (e.g. moves closer to
15 the project construction site). -[Amendment No. 7]

16
17 (8) As possible and practicable, the Certificate Holder shall conduct site preparation for
18 construction of the PW2 facility, or the BESS, in a manner that minimizes potential for
19 impacting nesting native birds protected by the Migratory Bird Treaty Act (MBTA), such
20 as conducting initial site clearing outside of the breeding season for most birds
21 (generally March-July). Prior to commencement of construction activity during the
22 breeding season, a qualified biologist will conduct a walk-down of the construction site
23 to determine the presence of any active bird nests and to rescue and relocate any
24 nongame protected wildlife (OAR 635-045-0002) that may be encountered according to
25 the methods provided by ODFW. Surveys will be conducted by a qualified wildlife
26 biologist and will include complete coverage of all areas to be disturbed using
27 systematic transects spaced a maximum of 5 meters apart. As applicable considering
28 construction schedule, PGE will also conduct a survey beginning in March prior to
29 construction to detect any streaked horned larks that could be using the very limited
30 amount of potential breeding habitat on site. PGE's survey protocol methods will be
31 coordinated with ODFW. Construction personnel will be trained regarding avian
32 awareness issues and reporting of bird nests and dead birds found at the construction
33 site (also see Condition D.8(1) for wildlife awareness requirements). The Certificate
34 Holder will consult with USFWS and ODFW regarding any active bird nests found within
35 the construction disturbance area. [Amendments No. 7, 9 & 911]

36 (9) The Certificate Holder shall schedule construction at the existing raw water intake
37 pump station to avoid the purple martin nesting season (April 1 through June 30).
38 Before beginning construction at the existing raw water intake pump station, the
39 Certificate Holder shall conduct a survey to determine the exact location of any purple
40 martin nests. Should the Certificate Holder cause unavoidable impacts to occur to any
41 purple martin nest, it shall construct, install and maintain an artificial nest site at a

1 nearby location. It shall pick an appropriate location in consultation with ODFW and the
2 Department.

3
4 (10) When working around riparian areas or waterways, the Certificate Holder shall use
5 only herbicide labeled for use in those areas. The Certificate Holder shall abide by all
6 labeling instructions when using herbicides for vegetation maintenance associated with
7 the energy facility and transmission lines rights-of-way.

8
9 (11) The Certificate Holder shall locate chemical storage, servicing of construction and
10 maintenance equipment and vehicles, and overnight storage of wheeled vehicles within
11 the energy facility site boundary, or at least 330 feet from any wetland or waterway.
12 [Amendment No. 11]

13
14 (12) The Certificate Holder shall not construct any structure other than fences, signs and
15 the water supply pipeline within 50 feet of any Class I river, stream or the emergent
16 vegetation adjacent to such a river or stream or within 25 feet of any other rivers,
17 streams, and sloughs or the emergent vegetation adjacent to such a river, stream, or
18 slough or within the riparian corridors established under Columbia County Zoning
19 Ordinance Section 1172, as appropriate for the local jurisdiction. [Amendment No. 2]

20
21 (13) To mitigate for impacts to 19 acres of non-native grassland, the Certificate Holder
22 shall protect 19 acres of on-site emergent wetland habitat identified in the ASC by
23 execution of a conservation easement for the life of the energy facility. Before beginning
24 construction of Phase 1 of the energy facility, the Certificate Holder shall provide a copy
25 of the conservation easement or similar conveyance to the Department. [Amendment
26 No. 1]

27
28 (14) The Certificate Holder shall restore temporary upland and wetland disturbance
29 areas by returning the areas to their original grade and seeding, with appropriate seed
30 mixes as recommended by ODFW and as described in Exhibit P, Section P.8.1, of
31 Certificate Holder's Request for Amendment No. 7,⁴ and by mulching the areas with
32 straw. the Revegetation and Noxious Weed Control Plan included as Attachment D to the
33 Final Order on Request for Amendment 11. [Amendments No. 7 & 11]

34
35 (15) The Certificate Holder shall not clear any more riparian vegetation than is necessary
36 for the permitted land use, including clearing required for safety purposes, during
37 construction or operation of the facility.

~~⁴ PGE submitted revised Exhibit P of its request for amendment 7 in a November 19, 2009 letter from Rick Tetzloff to Adam Bless "Port Westward Generating Project – Revisions to Request to Amend Site Certificate (Amendment 7) to address ODFW comments." Revised section P.8.1 is attached to this Site Certificate as Attachment D.~~

1
2 (16) During construction of the transmission line(s) and maintenance of the rights-of-
3 way, the Certificate Holder shall limit clearing of vegetation in riparian areas and
4 wetlands to that needed to prevent contact with the transmission line and to meet
5 clearance standards for safety and transmission line reliability, as provided in the
6 appropriate sections of the National Electrical Code. [Amendment No. 2]
7

8 (17) The Certificate Holder shall mitigate for impacts to riparian shrub and forest habitat
9 that result in canopy cover of less than 25 percent by revegetating these areas with
10 appropriate native woody species according to the Typical Revegetation Plan (ASC,
11 Exhibit Q, page Q-6.1).
12

13 (18) The Certificate Holder ~~1~~ shall, as soon as practicable and appropriate after
14 completing construction in an area, implement the mitigation measures specified in
15 Conditions D.8(13), D.8(14) and D.8(17).
16

17 ~~(19) The Certificate Holder shall monitor revegetated areas for a period of five years and~~
18 ~~shall ensure that new vegetation has an 80 percent survival rate~~[Deleted]. [Amendment
19 No. 11]
20

21 ~~(20) The Certificate Holder shall monitor and control nuisance and invasive plant species~~
22 ~~annually for a period of five years in areas where vegetation removal and/or~~
23 ~~revegetation has occurred in (1) riparian areas and wetlands along the transmission line~~
24 ~~rights-of-way, and (2) in areas temporarily disturbed by construction of the raw water,~~
25 ~~gas, and process water discharge lines, in all temporary construction staging and~~
26 ~~laydown areas, and in the spoils disposal site~~[Deleted]. [Amendments No. 3, 10 & 1011]
27

28 ~~(21) The Certificate Holder shall submit an annual monitoring report to ODFW and the~~
29 ~~Department during the five-year monitoring period specified in Condition~~
30 ~~D.8(20)~~[Deleted]. [Amendment No. 11]
31

32 ~~(22) Within one year after completion of construction of the facility or the Port~~
33 ~~Westward to BPA Allston Substation Transmission Line, if constructed separately, the~~
34 ~~Certificate Holder shall provide a summary report to ODFW and the Department that~~
35 ~~identifies the revegetation actions it took and the results of revegetation monitoring~~
36 ~~conducted to that time. If the Certificate Holder constructs the energy facility in phases,~~
37 ~~the Certificate Holder shall provide the summary report to ODFW and the Department~~
38 ~~within one year after completion of each phase~~[Deleted]. [Amendments No. 1 & 11]
39

40 ~~(23) Within three months after completion of the final annual monitoring survey, the~~
41 ~~Certificate Holder shall provide a report to ODFW and the Department that presents the~~
42 ~~results of its revegetation monitoring~~[Deleted]. [Amendment No. 11]
43

1 ~~(24) If revegetation is not successful at establishing appropriate plant cover and~~
2 ~~controlling erosion, the Certificate Holder shall take remedial actions as the Department~~
3 ~~directs~~~~[Deleted]. [Amendment No. 11]~~
4

5 (25) To mitigate for impacts to 8.5 acres of non-native grassland, the Certificate Holder
6 shall protect and enhance at least 8.5 acres of on-site emergent wetland habitat
7 identified in Certificate Holder's Request for Amendment No. 7 by execution of a
8 conservation easement for the life of the energy facility. Habitat enhancement
9 measures will include planting of trees and shrubs and controlling invasive plant species
10 as described in revised Exhibit P, Section P.8.1 of Certificate Holder's Request for
11 Amendment No. 7, November 19, 2009 revision (Attachment D of the Site Certificate).
12 Before beginning construction of Unit 2 of the energy facility, the Certificate Holder shall
13 provide a copy of the conservation easement or similar conveyance to the Department.
14 [Amendment No. 7]
15

16 ~~(26) Within 120 days of completing construction of Unit 2, the Certificate Holder shall~~
17 ~~initiate restoration of all temporarily disturbed construction laydown areas by~~
18 ~~implementing the following measures:~~
19

20 ~~(1) Removal of gravel and fabric~~

21 ~~(2) Ground decompaction~~

22 ~~(3) Revegetation with an ODFW-approved native seed mix.~~

23
24 ~~The Certificate Holder shall maintain and monitor revegetated areas and report on the~~
25 ~~status of revegetation efforts until the Department determines that the each~~
26 ~~revegetated area has demonstrated successful uplift for two consecutive years. The~~
27 ~~Department shall determine successful uplift in consultation with ODFW, based on the~~
28 ~~following percent cover targets:~~
29

30 ~~60% cover by native grasses~~

31 ~~10% cover by native forbs~~

32 ~~10% cover by bare ground~~

33 ~~Not to exceed 20% cover by non-native plants.~~

34 ~~[Deleted] [Amendments No. 10 & 11]~~
35
36

37
38 (27) The Certificate Holder shall not use the South Laydown Area prior to October 1,
39 2013, unless a qualified biologist has determined that the adjacent osprey nest is
40 inactive, and the Department has concurred with that determination in writing.
41 [Amendment No. 10]
42

1 (28) The Certificate Holder shall implement the Revegetation and Noxious Weed Control
2 Plan included as Attachment D to the Final Order on Request for Amendment 11. The
3 Revegetation and Noxious Weed Control Plan may be amended from time to time by
4 agreement of the certificate holder and the Council. Such amendments may be made
5 without amendment of the site certificate. The Council authorizes the Department to
6 agree to amendments to this plan. The Department shall notify the Council of all
7 amendments, and the Council retains the authority to approve, reject, or modify any
8 amendment of this plan agreed to by the Department. [Amendment No. 11]
9

10 **D.9. THREATENED AND ENDANGERED SPECIES**

11
12 (1) Before beginning construction of the transmission line between the BPA Allston
13 Substation and the Trojan Nuclear Plant, the Certificate Holder shall direct qualified
14 personnel to conduct species ground surveys along the transmission line corridor and within
15 150 feet on either side of the transmission line corridor at the appropriate time of year to
16 determine the presence of listed plant species. If listed plant species are identified in the
17 course of the species ground surveys, their presence shall be noted on maps, and PGE shall
18 provide copies of the maps to the Department and the Department of Agriculture.
19

20 (2) During construction of the transmission lines, the Certificate Holder shall manipulate
21 construction equipment and site poles, towers and access roads to avoid impacts, except as
22 provided in Condition D.9(4), to known populations of state- or federally-listed plant
23 species.
24

25 (3) The Certificate Holder shall ensure that all maintenance practices along the transmission
26 line corridor minimize impacts to known populations of listed plant species.
27

28 (4) In the event the Certificate Holder determines that it cannot avoid known populations of
29 listed plant species, the Certificate Holder shall engage qualified personnel to determine
30 whether the proposed action has the potential to reduce appreciably the likelihood of the
31 survival or recovery of the listed species, notify the Department of its findings, and obtain
32 approval from the Oregon Department of Agriculture before proceeding with construction
33 activities that affect the listed plant species. (OAR 603-073-0090).
34

35 (5) Before beginning construction of the transmission line, the Certificate Holder shall
36 employ measures to protect raptors in the design and construction of transmission lines. It
37 shall design all energized transmission conductors with either a minimum separation of nine
38 feet or other measures to reduce the potential for electrocution of raptors or other birds.
39

40 (6) The Certificate Holder shall not conduct construction activities at the transmission line
41 terminus at the Trojan Nuclear Plant that generate extreme noise or high levels of visual
42 disturbance during the peregrine falcon critical nesting period from January 1 to June 30.
43 Such activities include pile driving, excavation, and grading for ground stabilization purposes

1 and site preparation. Construction activities involving lower levels of visible activity and less
2 noise are allowed throughout the year. These include such activities as excavating and
3 setting forms, pouring footings, erecting power line towers and bus duct, hanging conductor
4 wires, installing control wires, and testing.

5
6 (a) Prior to beginning construction at the terminus site, the Certificate Holder shall
7 provide the Department and ODFW with a final construction schedule that lists various
8 construction activities, and time periods when specific work will be conducted. The
9 schedule shall include information on the types of heavy construction equipment that
10 will be used and the approximate number of workers and shall demonstrate that the
11 construction activities are consistent with the limitations of this condition. The
12 Certificate Holder shall provide scheduling updates as necessary to alert the Department
13 and ODFW ahead of time of any proposed changes in the work schedule should the
14 changes occur during the critical nesting period.

15
16 (b) The Certificate Holder shall monitor peregrine falcon activity at the transmission line
17 terminus at the Trojan Nuclear Plant between January 1 to June 30 of construction
18 years. Before beginning construction at the transmission line terminus at the Trojan
19 Nuclear Plant, the Certificate Holder shall coordinate with ODFW and the Department
20 and shall consequently prepare a peregrine falcon contingency plan. This contingency
21 plan shall address actions that the Certificate Holder would undertake in the event that
22 the Department and ODFW determine that monitoring shows the peregrine falcon pair's
23 nesting activities are negatively affected by the transmission line construction activities.

24
25 (c) The Certificate Holder shall not proceed with construction activity at the
26 transmission line terminus at the Trojan Nuclear Plant during the peregrine falcon
27 critical nesting period from January 1 to June 30 to the extent that ODFW or the
28 Department determines that the activity is not consistent with the limitations of this
29 condition. [Amendment No. 3]

30
31 (7) The Certificate Holder shall plant suitable vegetative species for deer forage and cover
32 within the wetland mitigation/enhancement area.

33
34 (8) The Certificate Holder shall coordinate with ODFW about whether to conduct site-
35 specific fish sampling at waterways that do not have confirmation of species presence or
36 absence along the transmission line corridor. If ODFW recommends that the Certificate
37 Holder conduct site-specific sampling, the Certificate Holder shall do so and report the
38 results to ODFW and the Department.

39
40 ~~(9) The Certificate Holder shall not undertake construction at the energy facility site during~~
41 ~~the bald eagle nesting season unless it obtains a final Biological Opinion and Incidental Take~~
42 ~~Statement issued by the U.S. Fish and Wildlife Service that addresses potential impacts to~~
43 ~~the bald eagle nest site on the northwest tip (downstream end) of Crims Island.~~

1
2 ~~(a) The Certificate Holder shall construct and operate the energy facility consistent with the~~
3 ~~final Biological Opinion and Incidental Take Statement issued by the U.S. Fish and Wildlife~~
4 ~~Service.~~

5
6 ~~(b) If the requirements of the Biological Opinion and Incidental Take Statement conflict with~~
7 ~~any conditions imposed in this Site Certificate, the Certificate Holder shall consult with the~~
8 ~~Department and ODFW to resolve the conflicts prior to taking any action in reliance on the~~
9 ~~Biological Opinion and Incidental Take Statement~~~~[Deleted].~~ [Amendments No. 3 & 11]
10

11 12 **D.10. SCENIC AND AESTHETIC VALUES**

13
14
15 (1) During construction of the facility, the Certificate Holder shall ensure that
16 contractors move equipment out of the construction area when it is no longer expected
17 to be used. To the extent practical, contractors shall lower equipment with long arms,
18 such as cranes, bucket trucks, backhoes, when not in use in order to minimize visibility.
19

20 (2) During construction of the facility, the Certificate Holder shall control dust through
21 the application of water.
22

23 (3) During construction of the energy facility, the Certificate Holder shall use directing
24 and shielding devices on lights to minimize off-site glare. When there is no nighttime
25 construction activity, the Certificate Holder shall minimize night lighting consistent with
26 safety and security requirements.
27

28 (4) During operation of the energy facility, the Certificate Holder shall use directing and
29 shielding devices on lights to minimize off-site glare, consistent with safety and security
30 requirements.
31

32 (5) Before beginning construction of the energy facility, the Certificate Holder shall
33 submit to Columbia County and the Department an outdoor lighting plan that shows
34 how it will minimize glare from the energy facility site, consistent with Conditions
35 D.10(3) and D.10(4).
36

37 (6) The Certificate Holder shall paint structures with low-glare paint in colors selected to
38 complement the surrounding foreground and background colors.
39

40 (7) After completion of construction of related and supporting pipelines in an area, the
41 Certificate Holder shall re-vegetate any undeveloped areas disturbed by construction
42 activities using native species, including grasses, shrubs, and trees. If necessary, the

1 Certificate Holder shall water re-vegetated areas on a regular basis until the plant
2 species have been successfully established.
3

4 **D.11. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES** 5

6 (1) Before beginning construction of the Port Westward to BPA Allston Substation
7 Transmission Line or the BPA Allston Substation to Trojan Transmission Line, the
8 Certificate Holder shall complete an archaeological survey of the approved transmission
9 line corridors in consultation with the Oregon Historic Preservation Office (“SHPO”), the
10 Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the
11 Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated
12 Tribes of the Siletz Indian ~~Reservation~~ of Oregon, the Chinook Tribe in Washington, and
13 appropriate federal agencies. The Certificate Holder shall ensure that a qualified
14 archaeologist evaluates all cultural resources identified during the cultural resources
15 survey. The Certificate Holder shall report to SHPO and the Department about whether
16 its archaeologist recommends that a discovery is significant or not significant. If SHPO
17 determines that a discovery is significant, the Certificate Holder shall make
18 recommendations to the Council for mitigation in consultation with SHPO, the
19 Department, the tribes, and other appropriate parties. Mitigation measures shall
20 include avoidance or data recovery. [Amendments No. 1 & 11]
21

22 (2) During construction of the facility, the Certificate Holder shall ensure that a qualified
23 person instructs construction personnel in the identification of cultural materials.
24

25 (3) During construction of the facility, in the event any artifacts or other cultural
26 materials are identified, the Certificate Holder shall cease all ground-disturbing activities
27 until a qualified archaeologist can evaluate the significance of the find. The Certificate
28 Holder shall report to SHPO and the Department about whether its archaeologist
29 recommends the artifacts or cultural materials are significant or not significant. If SHPO
30 determines that the materials are significant, the Certificate Holder shall make
31 recommendations to the Council for mitigation in consultation with SHPO, the
32 Department, the tribes, and other appropriate parties. Mitigation measures shall
33 include avoidance or data recovery. The Certificate Holder shall not restart work in the
34 affected area until it has demonstrated to the Department that it has complied with the
35 archaeological permit requirements administered by SHPO. [Amendment No. 1]
36

37 (4) The Certificate Holder shall allow monitoring by the Confederated Tribes of the
38 Warm Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand
39 Ronde Community of Oregon, the Confederated Tribes of the Siletz Indian ~~Reservation~~
40 of Oregon, and the Chinook Tribe in Washington of earth-moving activities within any
41 areas with a potential for containing archaeological remains. [Amendment No. 11]
42

1 (5) Before beginning construction of the facility or of the Port Westward to BPA Allston
2 Substation Transmission Line separately, the Certificate Holder shall notify the
3 Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the
4 Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated
5 Tribes of the Siletz Indians ~~Reservation~~ of Oregon, and the Chinook Tribe in Washington
6 and provide their representatives the opportunity to be available for periodic on-site
7 monitoring during construction activities. If the Certificate Holder constructs the energy
8 facility in phases, the Certificate Holder shall notify the Tribes prior to construction of
9 each phase. [Amendment~~s~~ No. 1 & 11]

10
11 (6) If construction activities for the secondary gas pipeline occur at a level below the
12 sandy dredge fill (a depth of 10 feet), then the Site Certificate holder or NW Natural
13 shall immediately contact the State Historic Preservation Officer. [Amendment 5]

14
15
16
17 **D.12. RECREATION**

18 [No Conditions]

19
20 **D.13. PUBLIC SERVICES**

21
22 (1) During construction, the Certificate Holder shall hire a contractor to provide
23 chemical toilet services or other appropriate facilities for construction personnel.

24
25 (2) Prior to applying for construction permits for the second power generation unit, the
26 Certificate Holder shall enter into an Amended Traffic Improvement Agreement and pay
27 a new Traffic Improvement Contribution to Columbia County according to the Amended
28 Traffic Improvement Agreement and consistent with a Traffic Impact Analysis Study for
29 the second power generation unit performed according to parameters agreed to by
30 Columbia County and the Certificate Holder. [Amendment No. 8]

31
32 (3) The Certificate Holder shall not agree to amend the Agreement with Columbia
33 County to reduce, revoke or waive the requirement for payment of the appropriate TIC
34 without prior approval of the Council; however, such approval by the Council shall not
35 require an amendment to the Site Certificate.

36
37 (4) Before beginning construction of the energy facility, the Certificate Holder shall
38 coordinate with Columbia County the improvement and maintenance of signage and
39 striping at the mainline rail crossing on Kallunki Road, including the installation of "DO
40 NOT STOP ON TRACKS" signs.

41
42 (5) If construction of the energy facility occurs concurrently with construction of other
43 projects in the Port Westward Industrial Area, the Certificate Holder shall coordinate

1 with other users of the Port Westward Industrial Area to provide a carpooling program
2 that identifies and/or creates park-and-ride locations to facilitate carpooling.

3
4 (6) If construction of the energy facility occurs concurrently with construction of other
5 projects in the Port Westward Industrial Area, the Certificate Holder shall coordinate
6 with Columbia County and other users of the Port Westward Industrial Area on the
7 implementation of a staggered shift schedule if Columbia County determines that traffic
8 conditions warrant it.

9
10 (7) During construction of the energy facility, the Certificate Holder shall use barge and
11 railroad deliveries of bulk materials to the extent practicable to minimize the number of
12 freight truck deliveries on local roads.

13
14 (8) The Certificate Holder shall construct a fire protection system within the buildings
15 and yard areas of the energy facility site that meets the requirements of the Uniform
16 Fire Code, as amended by Oregon and the National Fire Protection Association
17 standards, and all other applicable fire protection standards in effect at the time of
18 construction.

19
20 (9) The Certificate Holder shall provide a dedicated reserve capacity of 180,000 gallons
21 in the raw water storage tank to serve as the fire suppression water source.

22
23 (10) For fire truck access, the minimum inside turning radius of curves in the road
24 system on the energy facility site shall be 40 feet.

25
26 (11) Prior to start of construction of Unit 2 of the energy facility, the certificate holder
27 shall obtain from the Water Resources Department (WRD) a permanent water right
28 transfer subject to the following conditions:

29 a. the right to the use of the water is restricted to beneficial use at the place of use
30 described in transfer application T-10955, and is subject to all other conditions and
31 limitations contained in Certificate ~~Error! Reference source not found.~~Error!
32 ~~Reference source not found.~~Error! Reference source not found.Error! Reference
33 ~~source not found.~~81969 and any related decree.

34 b. The quantity of water diverted at the new point of diversion, shall not exceed the
35 quantity of water (3.0 cfs) lawfully available at the original point of diversion.

36 c. WRD may require the water user to install a headgate, a totalizing flow meter, or
37 other suitable measuring devices at the point of diversion. If WRD notifies the water
38 user to install a headgate, a totalizing flow meter, or other measuring devices, the
39 water user shall install such devices specified by WRD within the period allowed in
40 the notice. Once installed, the water user shall maintain the meters or measuring

1 devices in good working order and shall allow the Watermaster access to the meters
2 or measuring devices.

3 d. The water user shall maintain and operate a fish screening and/or by-pass device,
4 as appropriate, at the point of diversion consistent with the Oregon Department of
5 Fish and Wildlife's operational and maintenance standards.

6 e. The approved changes shall be completed and full beneficial use of the water shall
7 be made on or before October 1, 2015. -A Claim of Beneficial Use prepared by a
8 Certified Water Rights Examiner shall be submitted by the Certificate Holder to the
9 Department within one year after the deadline for completion of the changes and
10 full beneficial use of the water.

11
12 f. Prior to issuance of the permanent transfer, the certificate holder shall provide to
13 ODOE and WRD a report of land ownership for the lands to which the water right is
14 appurtenant (the FROM lands). The report must be prepared by a title company. The
15 title company's report must either be: 1) prepared within three months of the
16 Energy Facility Siting Council's Final Order on PWGP Amendment 7, or 2) reflect
17 ownership information within three months of the recording of any water right
18 conveyance agreements for the property in the county deed records. The ownership
19 report shall include:

20
21 (A) Date reflected by the ownership information

22
23 (B) List of owners at that time

24
25 (C) Legal description of the property to which the water right involved in the
26 transfer is currently appurtenant, and

27
28 (D) A notarized statement of consent from any landowner listed in the
29 ownership report who is not already included in the transfer application, or
30 other information such as a water right conveyance agreement, if applicable.
31 [Amendments No. 7 & 9]

32
33 (12) Before beginning operation of the BESS, the certificate holder will provide
34 Emergency Response Plans for the facility, updated with response procedures specific to
35 the BESS, to the Clatskanie Rural Fire Department, the St. Helens Fire District, and the
36 Department. [Amendment No. 11]
37

38
39 **D.14. WASTE MINIMIZATION, OAR 345-022-0120**
40

1 (1) During construction, operation and retirement of the energy facility, the Certificate
2 Holder shall separate recyclable materials from the solid waste stream to the extent
3 practicable, store those materials on site until sufficient quantities exist to make
4 recycling economic, and periodically deliver or sell those materials to a recycling facility.
5

6 (2) During construction, operation and retirement of the energy facility, the Certificate
7 Holder shall segregate all used oil, mercury-containing lights, and lead-acid and
8 nickel-cadmium, lithium-ion batteries. The Certificate Holder shall store such materials
9 on site, and deliver such materials to a recycling firm specializing in the proper disposal
10 of such materials. [Amendment No. 11]
11

12 (3) Upon completion of construction, the Certificate Holder shall dispose of all
13 temporary structures not required for facility operation and all timber, brush, refuse,
14 and flammable or combustible material resulting from clearing of land and construction
15 of the facility.
16

17 (4) During operation of the energy facility, the Certificate Holder shall convey all storm
18 water and water discharges other than sanitary sewage to pervious areas to allow for
19 percolation into the shallow groundwater.
20

21 (5) During operation of the energy facility, the Certificate Holder shall use internal
22 recycling of aqueous streams whereby water shall be recycled several times in the
23 cooling system before being discharged.
24

25 **D.15. CARBON DIOXIDE STANDARD**

26
27 (1) Before beginning construction of Phase 1 and Phase 2 of the energy facility, respectively,
28 the Certificate Holder shall submit to The Climate Trust a bond or letter of credit in the
29 amount of the monetary path payment requirement (in 2002 dollars for Phase 1 and in 1st
30 quarter 2010 dollars for Phase 2) as determined by the calculations set forth in Condition
31 D.15(3) and based on the estimated heat rates and capacities certified pursuant to
32 Condition D.15(4) and as adjusted in accordance with the terms of this Site Certificate
33 pursuant to Condition D.15(3)(c). For the purposes of this Site Certificate, the "monetary
34 path payment requirement" means the offset funds determined pursuant to OAR 345-024-
35 0550 and -0560 and the selection and contracting funds that the Certificate Holder must
36 disburse to The Climate Trust, as the qualified organization, pursuant to OAR 345-024-0710
37 and this Site Certificate. The offset fund rate for the monetary path payment requirement
38 shall be \$0.85 per ton of carbon dioxide (in 2002 dollars) for Phase 1 and \$1.27 per ton of
39 carbon dioxide (in 1st quarter 2010 dollars) for Phase 2. The calculation of 2002 and 1st
40 quarter 2010 dollars shall be made using the Index set forth in Condition D.3(5) and as
41 required below in subsection (g). [Amendments No. 1, 6 & 7]
42

1 (a) The form of the bond or letter of credit and identity of the issuer shall be subject to
2 approval by the Council.

3
4 (b) The form of the Memorandum of Understanding “MOU”) between the Certificate
5 Holder and the Climate Trust establishing the disbursement mechanism to transfer
6 selection and contracting funds and offset funds to The Climate Trust shall be
7 substantially in the form of Attachment A to this Site Certificate.

8
9 (c) Either the Certificate Holder or The Climate Trust may submit to the Council for the
10 Council’s resolution any dispute between the Certificate Holder and The Climate Trust
11 that concerns the terms of the bond, letter of credit, or MOU concerning the
12 disbursement mechanism for the monetary path payments, or any other issues related
13 to the monetary path payment requirement. The Council’s decision shall be binding on
14 all parties.

15
16 (d) The bond or letter of credit shall remain in effect until such time as the Certificate
17 Holder has disbursed the full amount of the monetary path payment requirement to
18 The Climate Trust. The Certificate Holder may reduce the amount of the bond or letter
19 of credit commensurate with payments it makes to The Climate Trust. The bond or
20 letter of credit shall not be subject to revocation before disbursement of the full
21 monetary path payment requirement.

22
23 (e) In the event that the Council approves a new Certificate Holder for the energy
24 facility:

25
26 (A) The new Certificate Holder shall submit to the Council for the Council’s approval
27 the form of a bond or letter of credit that provides comparable security to the bond
28 or letter of credit of the current Certificate Holder. The Council’s approval of a new
29 bond or letter of credit shall not require a site certificate amendment.

30
31 (B) The new Certificate Holder shall submit to the Council for the Council’s approval
32 the form of an MOU between the new Certificate Holder and The Climate Trust that
33 is substantially in the form of Attachment A to this Site Certificate. In the case of a
34 dispute between the new Certificate Holder and The Climate Trust concerning the
35 disbursement mechanism for monetary path payments or any other issues related
36 to the monetary path payment requirement, either party may submit the dispute to
37 the Council for the Council’s resolution as provided in Condition D.15(1)(c). Council
38 approval of a new MOU shall not require a site certificate amendment.

39
40 (f) If calculations pursuant to Condition D.15(5) demonstrate that the Certificate Holder
41 must increase its monetary path payments, the Certificate Holder shall increase the
42 bond or letter of credit sufficiently to meet the adjusted monetary path payment
43 requirement within the time required by Condition D.15(3)(c). Alternately, the

1 Certificate Holder may disburse any additional required funds directly to The Climate
2 Trust within the time required by Condition D.15(3)(c).

3
4 (g) The amount of the bond or letter of credit shall increase annually by the percentage
5 increase in the Index, and the disbursement of funds shall be pro-rated within the year
6 to the date of disbursement to The Climate Trust from the calendar quarter of Council
7 approval of the Site Certificate.

8
9 (2) The Certificate Holder shall disburse to The Climate Trust offset funds and selection and
10 contracting funds as requested by The Climate Trust. The Certificate Holder shall make
11 disbursements in response to requests from The Climate Trust in accordance with
12 subsections (a), (b), and (c).

13
14 (a) The Certificate Holder shall disburse all selection and contracting funds to The
15 Climate Trust before beginning construction.

16
17 (b) Upon notice pursuant to subsection (c), The Climate Trust may request from the
18 issuer of the bond or letter of credit the full amount of all offset funds available or it
19 may request partial payment of offset funds at its sole discretion. Notwithstanding the
20 specific amount of any contract to implement an offset project, The Climate Trust may
21 request up to the full amount of offset funds the Certificate Holder is required to
22 provide to meet the monetary path payment requirement.

23
24 (c) The Climate Trust may request disbursement of offset funds by providing notice to
25 the issuer of the bond or letter of credit that The Climate Trust has executed a letter of
26 intent to acquire an offset project. The Certificate Holder shall provide that the issuer of
27 the bond or letter of credit disburse offset funds to The Climate Trust within three
28 business days of a request by The Climate Trust for the offset funds in accordance with
29 the terms of the bond or letter of credit.

30
31 (3) The Certificate Holder shall submit all monetary path payment requirement calculations
32 to the Department for verification in a timely manner before submitting a bond or letter of
33 credit for Council approval and before entering into an MOU with The Climate Trust. The
34 Certificate Holder shall use the contracted design parameters for capacities and heat rates
35 that it reports pursuant to Condition D.15(4) to calculate the estimated monetary path
36 payment requirement, along with the estimated annual hours of operation of power
37 augmentation technologies and of non-base load power plants for Unit 2. The Certificate
38 Holder shall use the Year One Capacities and Year One Heat Rates that it reports for the
39 facility pursuant to Condition D.15(5) to calculate whether it owes additional monetary path
40 payments. [Amendment No. 7]

41
42 (a) The net carbon dioxide emissions rate for the base load gas plant shall not exceed
43 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power output, with

1 carbon dioxide emissions and net electric power output measured on a new and clean
2 basis, as defined in OAR 345-001-0010.

3
4 (b) The net carbon dioxide emissions rate for Unit 2, and for incremental emissions of
5 Unit 1 operating with power augmentation technologies that increase the capacity and
6 heat rate of the facility above the capacity and heat rate that it can achieve as a base
7 load gas plant on a new and clean basis (“power augmentation technologies”) shall not
8 exceed 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power output,
9 with carbon dioxide emissions and net electric power output measured on a new and
10 clean basis, as the Department may modify such basis pursuant to Condition D.15(4)(d)
11 and (g). [Amendment No. 7]

12
13 (c) When the Certificate Holder submits the Year One Test reports required in Condition
14 D.15(5), it shall increase its monetary path payments if the calculation using reported
15 data shows that the adjusted monetary path payment requirement exceeds the
16 monetary path payment requirement for which the Certificate Holder had provided a
17 bond or letter of credit before beginning construction, pursuant to Condition D.15(1).
18 The Certificate Holder shall submit its calculations to the Department for verification.

19
20 (A) The Certificate Holder shall make the appropriate calculations and fully disburse
21 any increased funds directly to The Climate Trust within 30 days of filing the Year
22 One Test reports.

23
24 (B) In no case shall the Certificate Holder diminish the bond or letter of credit it
25 provided before beginning construction or receive a refund from The Climate Trust
26 based on the calculations made using the Year One Capacities and the Year One
27 Heat Rates.

28
29 (4) The Certificate Holder shall include an affidavit certifying the heat rates and capacities
30 reported in subsections (a), (b), (e) and (f).

31
32 (a) Before beginning construction of the energy facility, the Certificate Holder shall
33 notify the Council in writing of its final selection of a gas turbine vendor and heat
34 recovery steam generator vendor and shall submit written design information to the
35 Council sufficient to verify the base-load gas plant’s designed new and clean heat rate
36 (higher heating value) and its net power output at the average annual site condition.

37
38 (b) Before beginning construction of the energy facility, the Certificate Holder shall
39 submit written design information to the Council sufficient to verify the facility’s
40 designed new and clean heat rate and its net power output at the average annual site
41 condition when operating with power augmentation technologies.

1 (c) Before beginning construction of the energy facility, the Certificate Holder shall
2 specify the estimated annual average hours that it expects to operate the power
3 augmentation technologies.
4

5 (d) Upon a timely request by the Certificate Holder, the Department may approve
6 modified parameters for testing the power augmentation technologies on a new and
7 clean basis, pursuant to OAR 345-024-0590(1). The Department's approval of modified
8 testing parameters for power augmentation technologies shall not require a site
9 certificate amendment.
10

11 (e) Before beginning construction of Unit 2, the Certificate Holder shall notify the
12 Council in writing of its final selection of the quantities and vendors for reciprocating
13 engines and combustion turbine generators and shall submit written design information
14 to the Council sufficient to verify the non-base load power plant's designed new and
15 clean heat rate (higher heating value) and its net power output at the average annual
16 site condition. [Amendment No. 7]
17

18 (f) Before beginning construction of Unit 2, the Certificate Holder shall specify the
19 estimated annual average hours that it expects to operate each type of generating unit.
20 The Certificate Holder may estimate annual average hours of operation in a manner
21 consistent with OAR 345-001-0010(38). [Amendment No. 7]
22

23 (g) Upon a timely request by the Certificate Holder, the Department may approve
24 modified parameters for testing the non-base load power plants of Unit 2 on a new and
25 clean basis, pursuant to OAR 345-024-0590(1). The Department's approval of modified
26 testing parameters for non-base load power plants shall not require a site certificate
27 amendment. [Amendment No. 7]
28

29 (5) Within the first 12 months of commercial operation of each phase of the energy facility,
30 the Certificate Holder shall conduct a 100-hour test at full power without power
31 augmentation technologies ("Year One Test-1") and a test at full power with power
32 augmentation technologies for Unit 1 ("Year One Test-2"). A 100-hour test performed for
33 purposes of the Certificate Holder's commercial acceptance of the facility shall suffice to
34 satisfy this condition in lieu of testing after beginning commercial operation. [Amendments
35 No. 6 & 7]
36

37 (a) Year One Test-1 shall determine the actual heat rate ("Year One Heat Rate-1") and
38 the net electric power output ("Year One Capacity-1") on a new and clean basis, without
39 degradation, with the results adjusted for the average annual site condition for
40 temperature, barometric pressure, and relative humidity, and using a rate of 117
41 pounds of carbon dioxide per million Btu of natural gas fuel pursuant to OAR 345-001-
42 0010(35).
43

1 (b) Year One Test-2 shall determine the actual heat rate (“Year One Heat Rate-2”) and
2 net electric power output (“Year One Capacity-2”) for the facility operating with power
3 augmentation technologies, without degradation, with the results adjusted for the
4 average annual site condition for temperature, barometric pressure and relative
5 humidity, and using a rate of 117 pounds of carbon dioxide per million Btu of natural gas
6 fuel pursuant to OAR 345-001-0010(35). The full power test shall be 100 hours duration
7 unless the Department has approved a different duration pursuant to Condition (4)(d)
8 or (4)(g). [Amendment No. 7]
9

10 (c) The Certificate Holder shall notify the Department at least 60 days before conducting
11 the tests required in subsections (a) and (b) unless a shorter time is mutually agreed
12 upon.
13

14 (d) Before conducting the tests required in subsections (a) and (b), the Certificate Holder
15 shall, in a timely manner, provide to the Department a copy of the protocol for
16 conducting the tests.
17

18 (e) Within two months after completing the Year One Tests, the Certificate Holder shall
19 provide to the Council a report of the results of the Year One Tests.
20

21 (f) If the certificate holder elects to report all carbon dioxide emissions based on direct
22 measurements pursuant to OAR 345-024-0590(5)(b), then the Year One Test for Unit 2 is
23 not required. However, if the Year One test is not performed, then the certificate
24 holder must continue to report carbon dioxide emissions using actual measured
25 emissions as reported to the Department of Environmental Quality or the U.S.
26 Environmental Protection Agency for all subsequent five year periods over the life of
27 Unit 2, and may not change its election to report based on new and clean heat rate in
28 any subsequent five year period. [Amendment No. 7]
29

30 (g) If the Year One test is not performed for Unit 2 pursuant to subsection (f) of this
31 condition, then the certificate holder shall report its net kWh generation and actual
32 measured carbon dioxide emissions for the 12 month period following start of
33 commercial operation of Unit 2. -The certificate holder shall report the net kWh
34 generation and actual carbon dioxide emissions for this period to the Department within
35 two months of the end of the first 12 month period.- The certificate holder shall use the
36 net kWh generation and measured carbon dioxide emissions to perform the calculations
37 to determine if supplemental monetary path payments are needed as set forth in
38 Condition D.15(6). -The certificate holder shall submit these calculations to the
39 Department for verification as set forth in Condition D.15(7). [Amendment No. 7]
40

41 (6) If calculations pursuant to Condition D.15(7) demonstrate that the Certificate Holder
42 must supplement its monetary path payments (“supplemental monetary path payment
43 requirement”), the Certificate Holder shall provide a bond or letter of credit sufficient to

1 meet the supplemental monetary path payment requirement within the time required by
2 Condition D.15(7)(b). The bond or letter of credit shall not be subject to revocation before
3 disbursement of the supplemental monetary path payment requirement. Alternately, the
4 Certificate Holder may disburse in cash any such supplemental monetary path payments
5 directly to The Climate Trust within the time required by Condition D.15(7). [Amendment
6 No. 7]
7

8 (7) The Certificate Holder shall submit all supplemental monetary path payment
9 requirement calculations and data to the Department for verification. [Amendment No. 7]
10

11 (a) Each five years after beginning commercial operation of Unit 1 (“Unit 1 five-year
12 reporting period”), the Certificate Holder shall report to the Department the annual
13 average hours Unit 1 operated with power augmentation technologies during that Unit
14 1 five-year reporting period, pursuant to OAR 345-024-0590(6). The Certificate Holder
15 shall use the Year One Capacity-2 and Year One Heat Rate-2 that it reports for Unit 1
16 pursuant to Condition D.15(5)(b) to calculate whether it owes supplemental monetary
17 path payments. The Certificate Holder shall submit Unit 1 five-year reports to the
18 Department within 30 days of the anniversary date of beginning commercial operation
19 of Unit 1. [Amendment No. 7]
20

21 (b) If the Department determines that Unit 1 exceeds the projected net total carbon
22 dioxide emissions calculated pursuant to Conditions D.15(4) and D.15(5), prorated for
23 five years, during any Unit 1 five-year reporting period described in subsection (a), the
24 Certificate Holder shall offset excess emissions for the specific reporting period
25 according to subsection (A) and shall offset the estimated future excess emissions
26 according to subsection (B), pursuant to OAR 345-024-0600(4). The Certificate Holder
27 shall offset excess emissions using the monetary path as described in OAR 345-024-
28 0710, except that contracting and selecting funds shall equal twenty (20) percent of the
29 value of any offset funds up to the first \$250,000 (in 2002 dollars) and 4.286 percent of
30 the value of any offset funds in excess of \$250,000 (in 2002 dollars). The Certificate
31 Holder shall disburse the funds to The Climate Trust within 30 days after notification by
32 the Department of the amount that the Certificate Holder owes. [Amendment No. 7]
33

34 (A) In determining the excess carbon dioxide emissions that the Certificate Holder
35 must offset for a Unit 1 five-year period, the Department shall apply OAR 345-024-
36 0600(4)(a). The Certificate Holder shall pay for the excess emissions at \$0.85 per ton
37 of carbon dioxide emissions (in 2002 dollars). The Department shall notify the
38 Certificate Holder and The Climate Trust of the amount of payment required, using
39 the monetary path, to offset excess emissions. [Amendments No. 6 & 7]
40

41 (B) The Department shall calculate estimated future excess emissions and notify the
42 Certificate Holder of the amount of payment required, using the monetary path, to
43 offset them. To estimate excess emissions for the remaining period of the deemed

1 30-year life of the facility, the Department shall use the parameters specified in OAR
2 345-024-0600(4)(b). The Certificate Holder shall pay for the estimated excess
3 emissions at \$ 0.85 per ton of carbon dioxide (in 2002 dollars). -The Department
4 shall notify the Certificate Holder of the amount of payment required, using the
5 monetary path, to offset future excess emissions. [Amendments No. 6 & 7]
6

7 (c) At the time the Certificate Holder submits to the Department the information
8 required by Condition D.15(4)(e) and (f), the Certificate Holder shall make the election
9 required by OAR 345-024-0590(5)(b).- The election shall apply for each reporting period
10 required pursuant to subsections (d) and (e). [Amendment No. 7]
11

12 (d) Each five years after beginning commercial operation of Unit 2 (“Unit 2 five-year
13 reporting period”), the Certificate Holder shall report to the Department the
14 information required by either subsection A or B. -The Certificate Holder shall submit
15 Unit 2 five-year reports to the Department within 30 days of the anniversary date of
16 beginning commercial operation of Unit 2.- [Amendment No. 7]
17

18 (A) If the Certificate Holder has elected to calculate any excess emissions using
19 annual average hours of operation and new and clean heat rates, the Certificate
20 Holder shall report the annual average hours of operation of each generating unit
21 within Unit 2 during that Unit 2 five-year reporting period, pursuant to OAR 345-
22 024-0590(6). The Certificate Holder shall use the Year One Capacity-1 and Year One
23 Heat Rate-1 that it reports for the corresponding generating units of Unit 2 pursuant
24 to Condition D.15(5)(a) to calculate whether it owes supplemental monetary path
25 payments. [Amendment No. 7]
26

27 (B) If the Certificate Holder has elected to calculate any excess emissions using
28 actual or measured carbon dioxide emissions as reported to either the Oregon
29 Department of Environmental Quality or the U.S. Environmental Protection Agency
30 pursuant to a mandatory carbon dioxide reporting requirement, the Certificate
31 Holder shall submit to the Department the carbon dioxide reporting data and net
32 kWh generation for that Unit 2 five-year reporting period and shall use that data to
33 determine whether it owes supplemental monetary path payments. [Amendment
34 No. 7]
35

36 (e) If the Department determines that Unit 2 exceeds the projected net total carbon
37 dioxide emissions calculated pursuant to Conditions D.15(4) and D.15(5), prorated for
38 five years, during any Unit 2 five-year reporting period described in subsection (d), the
39 Certificate Holder shall offset excess emissions for the specific reporting period
40 according to subsection (A) and shall offset the estimated future excess emissions
41 according to subsection (B), pursuant to OAR 345-024-0600(4). The Certificate Holder
42 shall offset excess emissions using the monetary path as described in OAR 345-024-
43 0710, except that contracting and selecting funds shall equal twenty (20) percent of the

1 value of any offset funds up to the first \$250,000 (in 1st quarter 2010 -dollars) and 4.286
2 percent of the value of any offset funds in excess of \$250,000 (in 1st quarter 2010
3 dollars). The Certificate Holder shall disburse the funds to The Climate Trust within 30
4 days after notification by the Department of the amount that the Certificate Holder
5 owes. [Amendment No. 7]
6

7 (A) In determining the excess carbon dioxide emissions that the Certificate Holder
8 must offset for a Unit 2 five-year period, the Department shall apply OAR 345-024-
9 0600(4)(a), unless the Certificate Holder has elected under OAR 245-024-0590(5) to
10 utilize actual or measured carbon dioxide emissions as reported to either the
11 Oregon Department of Environmental Quality or the U.S. Environmental Protection
12 Agency pursuant to a mandatory carbon dioxide reporting requirement. The
13 Certificate Holder shall pay for the excess emissions at \$1.27 per ton of carbon
14 dioxide emissions (in 1st Quarter 2010 dollars). The Department shall notify the
15 Certificate Holder and The Climate Trust of the amount of payment required, using
16 the monetary path, to offset excess emissions. [Amendment No. 7]
17

18 (B) The Department shall calculate estimated future excess emissions and notify the
19 Certificate Holder of the amount of payment required, using the monetary path, to
20 offset them. To estimate excess emissions for the remaining period of the deemed
21 30-year life of the facility, the Department shall use the parameters specified in OAR
22 345-024-0600(4)(b). The Certificate Holder shall pay for the estimated excess
23 emissions at \$1.27 per ton of carbon dioxide (in 1st quarter 2010 dollars). The
24 Department shall notify the Certificate Holder of the amount of payment required,
25 using the monetary path, to offset future excess emissions. [Amendment No. 7]
26

27 (8) The combustion turbine for the base-load gas plant and power augmentation
28 technologies and any combustion turbines constructed as part of Unit 2 shall be fueled
29 solely with pipeline quality natural gas or with synthetic gas with a carbon content per
30 million Btu no greater than pipeline-quality natural gas. Any reciprocating engines
31 constructed as part of Unit 2 shall be fueled solely with pipeline quality natural gas or with
32 synthetic gas with a carbon content per million Btu no greater than pipeline-quality natural
33 gas, except that distillate fuel may be used for micro-pilot systems. [Amendment No. 7]
34

35 (9) With respect to incremental capacity and fuel consumption increases for which the
36 Certificate Holder has not previously complied with the carbon dioxide standard, the
37 Certificate Holder shall comply substantially with Conditions D.15(1) through D.15(8) in lieu
38 of the Council's requiring an amendment, provided that:
39

40 (a) The Council determines, pursuant OAR 345-027-0050, that the Certificate Holder
41 does not otherwise require an amendment, and further provided that:
42

1 (b) The Certificate Holder shall meet the appropriate carbon dioxide emissions standard
2 and monetary offset rate in effect at the time the Council makes its determination
3 pursuant to OAR 345-027-0050.
4

5 (10) Notwithstanding Conditions D.15(1) through d.15(9), if the Certificate Holder begins
6 construction of the Port Westward to BPA Allston Substation Transmission Line, but no
7 other part of the energy facility or other related or supporting facilities, the Certificate
8 Holder shall not be required to comply with Conditions D.15(1) through D.15(9). The
9 Certificate Holder shall comply with Conditions D.15(1) through D.15(9) in connection with
10 construction of any part of the energy facility or related or supporting facilities other than
11 the Port Westward to BPA Allston Substation Transmission Line.
12

13 (11) If the Certificate Holder begins construction of Phase 1, but not Phase 2, the Certificate
14 Holder shall comply with Conditions D.15(1) through D.15(9) for Phase 1. If the Certificate
15 Holder later begins construction of Phase 2, the Certificate Holder shall comply with
16 Conditions D.15(1) through D.15(9)for Phase 2. [Amendment No. 1]
17

18 **E. OTHER APPLICABLE REGULATORY REQUIREMENTS**

19
20 **E.1. REQUIREMENTS UNDER COUNCIL JURISDICTION**

21
22 **E.1.a. Noise**

23
24 (1) During construction of the facility, the Certificate Holder shall schedule most heavy
25 construction to occur during daylight hours. Construction work at night shall be limited to
26 work inside buildings and other structures when possible.
27

28 (2) During construction of the facility, the Certificate Holder shall require contractors to
29 equip all combustion engine-powered equipment with exhaust mufflers.
30

31 (3) During construction of the energy facility, transmission lines or other related or
32 supporting facilities, the Certificate Holder shall establish a complaint response system at
33 the construction manager's office to address noise complaints.
34

35 (4) Within six months after the start of commercial operation of the energy facility, the
36 Certificate Holder shall retain a qualified noise specialist to measure noise levels associated
37 with the energy facility operation-when environmental conditions are expected to result in
38 maximum sound propagation between the source and the receivers and when the energy
39 facility is operating in a typical operations mode that produces maximum noise levels.

40 (a) The specialist shall measure noise levels at sites (1), (2), (5) and (6), as described in
41 Exhibit X of the ASC, to determine if actual noise are within the levels specified in the
42 applicable noise regulations in OAR 345-035-0035(1)(b)(B)(i).
43

1 (b) The Certificate Holder shall report the results of the noise evaluation to the
2 Department.

3
4 (c) If actual noise do not comply with applicable DEQ regulations, the Certificate Holder
5 shall take those actions necessary to comply with the regulations as soon as practicable.

6
7 (d) If initial measurements show that actual noise levels at site (5) by 7 dBA or more, the
8 Certificate Holder shall measure the noise levels as specified in this condition and shall
9 repeat the process outlined in subsections (a), (b), and (c) for site (5) within six months
10 after completion of the initial measurements.

11 (5) The Certificate Holder shall install silencers on short duration noise sources (e.g. steam
12 vents) from the heat recovery steam generator.

13
14 (6) The certificate holder shall confirm the PW1 noise level estimate at receiver 7 prior to
15 the final design of PW2 and propose mitigation measures as necessary to ensure that the
16 total PWGP noise levels do not exceed the limits specified in Table N-2 of the Final Order on
17 Port Westward Amendment 7. [Amendment No. 7]

18
19 (7) Within six months after the start of commercial operation of PW2, the Certificate Holder
20 shall retain a qualified noise specialist to measure noise levels associated with the PWGP
21 energy facility operation (the operation of PW1 and PW2) during late night hours when
22 environmental conditions are expected to result in maximum sound propagation between
23 the source and each receiver and when the entire energy facility is operating in a typical
24 operations mode that produces maximum noise levels.

25
26 (a) The specialist shall measure noise levels at sites (1), (2), (5),(6), and (7), to determine
27 if actual noise levels generated by the PWGP are within the levels shown on Table N-2 of
28 the Final Order on Amendment 7. The noise levels at sites 1 and 2 shall be measured
29 when the wind is either calm or out of a northerly direction but blowing no more than
30 10 mph. The noise levels at sites 5, 6 and 7 shall be measured when the wind is either
31 calm or out of a southerly direction but blowing no more than 10 mph.

32
33 (b) The Certificate Holder shall report the results of the noise evaluation to the
34 Department.

35
36 (c) If actual noise levels do not comply with applicable DEQ regulations, the Certificate
37 Holder shall take those actions necessary to comply with the regulations as soon as
38 practicable.

39
40 (d) If initial measurements at site (5) show that the hourly L₅₀ noise level is 48 dBA or
41 more with the Beaver Plant in operation or 47 dBA or more without the Beaver Plant in
42 operation, the Certificate Holder shall repeat the process outlined in subsections (a), (b),

1 and (c) at site (5) and (7) within six months after completion of the initial
2 measurements. [Amendment No. 7]
3

4 (7) To address the concern that noise from any other noise source not associated with the
5 PWGP or Beaver Plant have contributed to the results of the compliance noise
6 measurements, the Certificate Holder may measure noise levels to determine if the
7 operation of any other source has contributed to the compliance results. The Certificate
8 Holder shall report the results of the noise evaluation to the Department indicating any
9 adjustments to applicable noise limits consistent with OAR 340-035-0035(1)(b)(B)(i).
10 [Amendment No. 7]
11

12 E.1.b. Wetlands and Removal/Fill Permit
13

14 (1) Before beginning construction of Phase 1 of the energy facility or the Port Westward to
15 BPA Allston Substation Transmission Line, as appropriate, the Certificate Holder shall obtain
16 a U.S. Army Corps of Engineers and Oregon Division of State Lands Joint Removal/Fill Permit
17 substantially in the form of the Removal/Fill Permit in Attachment C; provided, that
18 mitigation required under the Removal/Fill Permit shall allow for accommodation of Corps
19 of Engineers mitigation requirements, subject to the concurrence of the Department, in
20 consultation with the Division of State Lands and affected federal agencies. [Amendment
21 No. 1]
22

23 (2) The Certificate Holder shall comply with state laws and rules applicable to the
24 Removal/Fill Permit that are adopted in the future to the extent that such compliance is
25 required under the respective statutes and rules.
26

27 (3) The Certificate Holder shall clearly stake the wetland boundary adjacent to the spoils
28 disposal area and the wetland number 4 boundary adjacent to the construction
29 laydown/staging areas in the vicinity of the energy facility and the wetland boundary
30 adjacent to the Beaver Generating Plant laydown/staging area prior to any ground
31 disturbing activity in corresponding areas, and shall maintain the staking until all ground-
32 disturbing activities in the corresponding areas have been completed. The Certificate Holder
33 shall instruct all contractors disposing of soil in the spoils disposal area and using the
34 construction laydown/staging areas in the vicinity of the energy facility or at the Beaver
35 Generating Plant laydown/staging area about the purpose of the staking and shall require
36 them to avoid any impact to the wetlands. [Amendments No. 3 & 10]
37

38 E.1.c. Public Health and Safety
39

40 (1) If local public safety authorities notify the Certificate Holder and the Department that
41 the operation of the energy facility is contributing significantly to ground level fogging or
42 icing along public roads and is likely to pose a significant threat to public safety, the
43 Certificate Holder shall cooperate with local public safety authorities regarding the posting

1 of warning signs on affected roads and the implementation of other reasonable safety
2 measures.

3
4 (2) The Certificate Holder shall design the transmission lines and backup electricity lines so
5 that alternating current electric fields shall not exceed 9 kV per meter at one meter above
6 the ground surface in areas accessible to the public. [Amendment No. 1]
7

8 (3) The Certificate Holder shall design the transmission lines and backup electricity lines so
9 that induced currents and voltage resulting from the transmission lines are as low as
10 reasonably achievable. [Amendment No. 1]
11

12 (4) The Certificate Holder shall develop and implement a program that provides reasonable
13 assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a
14 permanent nature that could become inadvertently charged with electricity are grounded
15 or bonded throughout the life of the transmission line.
16

17 (5) The Certificate Holder shall restore or mitigate the reception of radio and television at
18 residences and commercial establishments in the primary reception area to the level
19 present before operation of the transmission line at no cost to residents or businesses
20 experiencing interference resulting from the transmission line.
21

22 (6) The Certificate Holder shall design, construct and operate the transmission lines and
23 backup electricity lines in accordance with the requirements of the National Electrical Safety
24 Code. [Amendment No. 1]
25

26 (7) The Certificate Holder shall take reasonable steps to reduce or manage exposure to
27 electromagnetic fields (EMF), consistent with Council findings presented in the "Report of
28 EMF Committee to the Energy Facility Siting Council," March 30, 1993, and subsequent
29 findings. Effective on the date of this Site Certificate, the Certificate Holder shall provide
30 information to the public, upon request, about EMF levels associated with the energy
31 facility and related transmission lines and backup electricity lines. [Amendment No. 1]
32

33 (8) At least 30 days before beginning preparation of detailed design and specifications for
34 the electrical transmission line(s) and backup electricity line(s) or the natural gas pipelines,
35 the Certificate Holder shall consult with the Oregon Public Utility Commission staff to
36 ensure that its designs and specifications are consistent with applicable codes and
37 standards. [Amendments No. 1 & 5]
38

39 (9) With respect to the related or supporting natural gas pipelines, the Certificate Holder
40 shall design, construct and operate the pipeline in accordance with the requirements of the
41 U.S. Department of Transportation as set forth in Title 49, Code of Federal Regulations, Part
42 192. [Amendment No. 5]
43

1 **E.1.d. Water Pollution Control Facilities Permit**

2
3 (1) Before beginning commercial operation of Phase 1 of the energy facility, the Certificate
4 Holder shall demonstrate that the DEQ has issued to the Certificate Holder a Water
5 Pollution Control Facilities Permit, substantially in the form of Attachment B.1, allowing for
6 on-site sanitary waste disposal. [Amendment No. 1]

7
8 (2) The Certificate Holder shall comply with state laws and rules applicable to Water
9 Pollution Control Facilities Permits that are adopted in the future to the extent that such
10 compliance is required under the respective statutes and rules.

11
12 **F. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES**

13
14 **F.1. MANDATORY CONDITIONS IN SITE CERTIFICATES**

15
16 Amendment of Site Certificate

17
18 (1) The Council shall not change the conditions of the Site Certificate except in accordance
19 with the applicable provisions of OAR 345, Division 27, in effect on the date of the Council
20 action.

21
22 **Legal Description**

23
24 (2) Before beginning construction of Phase 1 of the energy facility, the Certificate Holder
25 shall submit to the Department a legal description of the site, except as provided in OAR
26 345-027-0023(6). [Amendment No. 1]

27
28 (a) The legal description of the site for purposes of beginning construction of Phase 1
29 may exclude the 180-foot wide strip (50 feet south and 130 feet north of an existing
30 road) immediately north of Phase 1.

31
32 (b) The Certificate Holder shall notify the Department in writing if it is exercising the
33 option to exclude the 180-foot wide strip from Phase 1.

34
35 (c) If the Certificate Holder excludes the strip from the legal description during Phase 1,
36 the Certificate Holder shall submit to the Office, before beginning construction of Phase
37 2 of the energy facility, a legal description indicating whether the energy facility site for
38 Phase 2 includes the 180-foot wide strip. [Amendment No. 2]

39
40 **General Requirements**

41
42 (3) The Certificate Holder shall design, construct, operate, and retire the facility:
43

1 (a) Substantially as described in the Site Certificate;

2
3 (b) In compliance with the requirements of ORS Chapter 469, applicable Council rules,
4 and applicable state and local laws, rules and ordinances in effect at the time the
5 Council issues the Site Certificate; and,

6
7 (c) In compliance with all applicable permit requirements of other state agencies.
8

9 **Construction Rights on Site**

10
11 (4) Except as necessary for the initial survey or as otherwise allowed for transmission lines
12 or pipelines in this condition, the Certificate Holder shall not begin construction, as defined
13 in OAR 345-001-0010, or create a clearing on any part of the site until the Certificate Holder
14 has construction rights on all parts of the site. For the purpose of this condition,
15 “construction rights” means the legal right to engage in construction activities. For
16 transmission lines or pipelines, if the Certificate Holder does not have construction rights on
17 all parts of the site, the Certificate Holder may nevertheless begin construction or create a
18 clearing on a part of the site if:

19
20 (a) The Certificate Holder has construction rights on that part of the site; and,

21
22 (b) The Certificate Holder would construct and operate part of the facility on that part of
23 the site even if a change in the planned route of the transmission line or pipeline occurs
24 during the Certificate Holder's negotiations to acquire construction rights on another
25 part of the site.
26

27 For purposes of this condition, the “site” for purposes of beginning construction of Phase 1 may
28 exclude the 180-foot wide strip (50feet south and 130 feet north of an existing road)
29 immediately north of Phase 1. [Amendment No. 2]
30

31 **Beginning and Completing Construction**

32
33 (5) The Certificate Holder shall begin construction of the energy facility by November 8,
34 2006. Beginning construction of the Port Westward to BPA Allston Substation Transmission
35 Line shall not satisfy this requirement. [Amendment No. 2]
36

37 (a) The Certificate Holder shall report promptly to the Department the date that it
38 began construction of the facility, as defined in OAR 345-001-0010. In reporting the
39 beginning of construction, the Certificate Holder shall briefly describe all work on the
40 site performed before beginning construction, including work performed before the
41 Council issued the Site Certificate and work performed to construct the Port Westward
42 to BPA Allston Substation Transmission Line, and shall state the cost of that work,
43 pursuant to OAR 345-026-0048. If the Certificate Holder constructs the energy facility in

1 phases, the Certificate Holder shall report the beginning of construction of each phase.
2 [Amendment No. 1]

3
4 (b) If the Certificate Holder begins construction of the Port Westward to BPA Allston
5 Substation Transmission Line, as defined in OAR 345-001-0010, prior to beginning
6 construction of the energy facility, it shall promptly report to the Department the date it
7 began construction of the transmission line.

8
9 (6) The Certificate Holder shall complete construction of the facility by May 8, 2015. The
10 completion of construction date is the day by which (1) the facility is substantially complete
11 as defined by the Certificate Holder's construction contract documents; (2) acceptance
12 testing is satisfactorily completed; and, (3) the energy facility is ready to commence
13 continuous operation consistent with the Site Certificate. Completion of construction of the
14 Port Westward to BPA Allston Substation Transmission Line separately shall not satisfy this
15 requirement. [Amendments No. 2, 6, 8 & 9]

16
17 (a) The Certificate Holder shall report promptly to the Department the date it completed
18 construction of the facility. If the Certificate Holder constructs the energy facility in
19 phases, the Certificate Holder shall report the date of completion of each phase.
20 [Amendment No. 1]

21
22 (b) If the Certificate Holder completes construction of the Port Westward to BPA Allston
23 Substation Transmission Line separately before completing construction of the facility, it
24 shall promptly report that date to the Department.

25
26 (c) Separate completion of construction of Port Westward to BPA Allston Substation
27 Transmission Line shall be the date that PGE makes it available to the
28 Summit/Westward Project to transmit energy.

29
30 (7) The Certificate Holder shall begin construction of the BESS by [Insert Date 3 years from
31 Effective Date]. [Amendment No. 11]

32
33 (8) The Certificate Holder shall complete construction of the BESS by [Insert Date 6 years
34 from Effective Date]. [Amendment No. 11]

35
36 **F.2 OTHER CONDITIONS BY RULE**

37
38 **Incident Reports**

39
40 (1) With respect to the related or supporting natural gas pipelines, the Certificate Holder
41 shall submit to the Department copies of all incident reports required under 49 CFR
42 §192.709 that involve the pipeline.
43

1 **Rights-of-Way**

2
3 (2) Before beginning operation of the energy facility, the Certificate Holder shall submit to
4 the Department a legal description of the permanent right-of-way where the Certificate
5 Holder has built a pipeline or transmission line within an approved corridor. The site of the
6 pipeline or transmission line subject to the Site Certificate is the area within the permanent
7 right-of-way. However, if the Certificate Holder completes construction of the Port
8 Westward to BPA Allston Substation Transmission Line before beginning construction of the
9 energy facility, the Certificate Holder shall submit to the Department a legal description of
10 the permanent right-of-way for that segment of that transmission line, notwithstanding
11 OAR 345-027-0023(6).
12

13 **Monitoring Programs**

14
15 (3) If the Certificate Holder becomes aware of a significant environmental change or impact
16 attributable to the facility, the Certificate Holder shall, as soon as possible, submit a written
17 report to the Department describing the impact on the facility and its ability to comply with
18 any affected Site Certificate conditions.
19

20 **Compliance Plans**

21
22 (4) Before beginning construction of the facility, the Certificate Holder shall implement a
23 plan that verifies compliance with all Site Certificate terms and conditions and applicable
24 statutes and rules. The Certificate Holder shall submit a copy of the plan to the Department.
25 The Certificate Holder shall document the compliance plan and maintain it for inspection by
26 the Department or the Council. However, if the Certificate Holder begins construction of the
27 Port Westward to BPA Allston Substation Transmission Line before beginning construction
28 of the energy facility, the applicable compliance plan shall relate to that phase of
29 construction.
30

31 **Reporting**

32
33 (5) Within six months after beginning any construction, and every six months thereafter
34 during construction of the energy facility and related or supporting facilities, the Certificate
35 Holder shall submit a semi-annual construction progress report to the Council. In each
36 construction progress report, the Certificate Holder shall describe any significant changes to
37 major milestones for construction. When the reporting date coincides, the Certificate
38 Holder may include the construction progress report within the annual report described in
39 Condition F.2(6).
40

41 (6) The Certificate Holder shall, within 120 days after the end of each calendar year after
42 beginning construction, submit an annual report to the Council that addresses the subjects

1 listed in OAR 345-026-0080(2). The Council secretary and the Certificate Holder may, by
2 mutual agreement, change the reporting date.

3
4 (7) To the extent that information required by OAR 345-026-0080(2) is contained in reports
5 the Certificate Holder submits to other state, federal or local agencies, the Certificate
6 Holder may submit excerpts from such other reports. The Council reserves the right to
7 request full copies of such excerpted reports.

8
9 **Schedule Modification**

10
11 (8) The Certificate Holder shall promptly notify the Department of any changes in major
12 milestones for construction, decommissioning, operation, or retirement schedules. Major
13 milestones are those identified by the Certificate Holder in its construction, retirement or
14 decommissioning plans.

15
16 **Correspondence with Other State or Federal Agencies**

17
18 (9) The Certificate Holder and the Department shall exchange copies of all correspondence
19 or summaries of correspondence related to compliance with statutes, rules and local
20 ordinances on which the Council determined compliance, except for material withheld from
21 public disclosure under state or federal law or under Council rules. The Certificate Holder
22 may submit abstracts of reports in place of full reports; however, the Certificate Holder shall
23 provide full copies of abstracted reports and any summarized correspondence at the
24 request of the Department.

25
26 **Notification of Incidents**

27
28 (10) The Certificate Holder shall notify the Department within 72 hours of any occurrence
29 involving the facility if:

30
31 (a) There is an attempt by anyone to interfere with its safe operation;

32
33 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-
34 caused event such as a fire or explosion affects or threatens to affect the public health
35 and safety or the environment; or,

36
37 (c) There is any fatal injury at the facility.

38
39
40 **G. GENERAL CONDITIONS**

41
42 (1) The general arrangement of the Port Westward Generating Project shall be substantially
43 as shown in the ASC.

1
2 (2) The Certificate Holder shall ensure that related or supporting facilities are constructed in
3 the corridors described in this Order and as shown in ASC and in the manner described in
4 this Order and the ASC.

5
6 (3) During construction and operation of the energy facility, the Certificate Holder shall
7 house the combustion turbine in an enclosure that provides thermal insulation, acoustical
8 attenuation, and fire extinguishing media containment and that would allow access for
9 routine inspection and maintenance.

10
11 Successors and Assigns

12
13 (4) Before any transfer of ownership of the facility or ownership of the Certificate Holder,
14 the Certificate Holder shall inform the Department of the proposed new owners. The
15 requirements OAR 345-027-0100 shall apply to any transfer of ownership that requires a
16 transfer of the Site Certificate.

17
18 Severability and Construction

19
20 (5) If any provision of this Site Certificate is declared by a court to be illegal or in conflict
21 with any law, the validity of the remaining terms and conditions shall not be affected, and
22 the rights and obligations of the parties shall be construed and enforced as if the Site
23 Certificate did not contain the particular provision held to be invalid. In the event of a
24 conflict between the conditions contained in the Site Certificate and the Council's Order,
25 the conditions contained in this Site Certificate shall control.

26
27 Governing Law and Forum

28
29 (6) This Site Certificate shall be governed by the laws of the State of Oregon.

30
31 (7) Any litigation or arbitration arising out of this agreement shall be conducted in an
32 appropriate forum in Oregon.

1
2 IN WITNESS WHEREOF, this Site Certificate has been executed by the State of Oregon, acting by
3 and through its Energy Facility Siting Council, and Portland General Electric Company.
4

5 ENERGY FACILITY SITING COUNCIL
6
7
8

9 By: _____
10 ~~W. Bryan Wolfe~~ Barry Beyler, Chair Date
11

12
13 PORTLAND GENERAL ELECTRIC COMPANY
14

15 By: _____
16 Date
17

18 ATTACHMENT A MEMORANDUM OF UNDERSTANDING: MONETARY PATH PAYMENT
19 REQUIREMENT

20 ATTACHMENT B WATER POLLUTION CONTROL FACILITIES PERMIT (B.1) AND ANALYSIS (B.2)

21 ATTACHMENT C REMOVAL/FILL PERMIT
22

23 ATTACHMENT D— PGE REQUEST FOR AMENDMENT 7, REVISED EXHIBIT P.8.1 (as
24 transmitted in November 19, 2009 letter Rick Tetzloff to Adam Bless “Port Westward
25 Generating Project – Revisions to Request to Amend Site Certificate (Amendment 7) to address
26 ODFW comments”)
27
28

Attachment B: Reviewing Agency Comments on Request for Amendment 11



July 11, 2019

Maxwell Woods
Senior Policy Advisor
Energy Facility Siting Division
Oregon Department of Energy
550 Capitol Street NE, 1st Floor
Salem, OR 97301

**RE: Columbia County Agency Comment for Amendment # 11 of the Site Certificate
for the Port Westward Generating Project / PGE Battery Storage Project**

Dear Mr. Woods,

This letter is a response to your previous email requesting agency comment on the application to add a 4-6 MW battery energy storage system to the Port Westward Generating Plant.

The subject property (Map/Taxlot 8415-00-00100) is zoned Resource Industrial Planned Development (RIPD) which is the appropriate zoning for Industrial uses such as large utility power generation facilities. This particular facility began commercial power generation in June of 2007 and has been in continuous operation ever since. Columbia County would treat the battery storage as a component of the previously approved primary use, which is a natural gas-fired power generation facility. The battery storage units will be located within the fence line and next to the existing electrical switch yard. This area is currently a flat, asphalt paved area and we expect no negative impacts to the overall operation of the facility or any adjacent properties.

The Columbia County Planning Department has reviewed the above mentioned application and finds that it includes accurate findings of fact to all relevant sections of the Columbia County Zoning Ordinance and the Columbia County Comprehensive Plan and we find no additional local criteria, state statute, or state planning goals that need to be addressed.

Thank you for the opportunity to review and comment. Feel free to contact me if you need any additional information or would like to discuss this matter further.

Cordially,


Matt Laird
Planning Manager

CLARK Christopher * ODOE

From: Sarah J Reif <Sarah.J.Reif@state.or.us>
Sent: Friday, July 26, 2019 11:51 AM
To: CLARK Christopher * ODOE; REIF Sarah J
Cc: WOODS Maxwell * ODOE
Subject: RE: Request for comment on preliminary Request for Amendment 11 of the Port Westward Generating Project Site Certificate

Hi Chris,

ODFW met with PGE to discuss these amendments back in February 2019. At that time, PGE proposed some changes to the seed mix. ODFW supports the proposed changes to the seed mix as proposed by PGE, to accommodate more variable (wet/dry) conditions. As for success criteria, ODFW finds the criteria originally established in the reveg plan may have been challenging to meet given the larger patterns of noxious weed abundance and spread on the larger landscape. To address this potential issue, ODFW recommended PGE establish paired monitoring plots outside the reveg area that could be used for comparison with the monitoring plots inside the reveg area. The intention would be to assess whether the reveg efforts were trending toward success, calibrated by the larger landscape forces. It is my understanding that we do not have those results yet, but that based on those results ODFW might recommend ODOE allow for adjustment of the existing success criteria. I was comfortable with the criteria living in the reveg plan as opposed to the condition of the site certificate, so that if they needed to change they could change within the attachment and not require a formal amendment.

To answer your remaining questions below, I do believe the methods and criteria in Attachment 4a align with what PGE and ODFW discussed with ODOE back in February, and that these will meet the fish and wildlife habitat standard.

Sarah Reif
Office: 503-947-6082
Cell: 503-991-3587

From: CLARK Christopher * ODOE <Christopher.Clark@oregon.gov>
Sent: Wednesday, July 10, 2019 4:02 PM
To: REIF Sarah J <Sarah.J.Reif@state.or.us>
Cc: WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>
Subject: RE: Request for comment on preliminary Request for Amendment 11 of the Port Westward Generating Project Site Certificate

Hello Sarah,

I just wanted to follow up and see if you are planning on submitting comments on PGE's proposed amendments to the Port Westward Site Certificate and revegetation plan. We primarily just wanted to confirm that you had reviewed the changes and didn't have any objections.

Thank you,



Christopher M. Clark
Siting Policy Analyst & Rules Coordinator
550 Capitol St. NE | Salem, OR 97301
P: 503-373-1033
P (In Oregon): 800-221-8035



Stay connected!

From: CLARK Christopher * ODOE
Sent: Thursday, May 23, 2019 12:37 PM
To: Sarah Reif (Sarah.J.Reif@state.or.us) <Sarah.J.Reif@state.or.us>
Cc: WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>
Subject: Request for comment on preliminary Request for Amendment 11 of the Port Westward Generating Project Site Certificate

Hello Sarah,

The Oregon Department of Energy would appreciate your review and comment on the preliminary Request for Amendment 11 of the Port Westward Generating Project Site Certificate. The Department received the preliminary request on April 23, 2019. The preliminary request seeks Council approval to add 4 to 6 megawatts of battery storage to the existing Port Westward facility, which would be constructed on and occupy approximately 100 x 90 feet within the facility's existing fenceline. The certificate holder has also proposed several amendments to the existing site certificate that are not specific to the proposed battery storage facility, including revisions to the site's revegetation plan and related site certificate conditions. The Department is currently reviewing the preliminary to determine whether the materials constitute a complete request under OAR 345-027-0063.

The preliminary request is available on our website at: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/PWG.aspx>.

We would like to request ODFW's review and comment on the preliminary request. In particular, we would appreciate your review of the proposed revegetation plan (Attachments 4a and 4b) and proposed changes to Section D.8 of the Site Certificate (Attachment 7) and comments on the following issues:

- Is the upland mix provided on page 3 of Attachment 4a of the preliminary request appropriate for restoration of the spoils disposal area and any potential reseeding of Unit 2 revegetation areas?
- Are the monitoring methods and schedule provided on page 3-4 of Attachment 4a of the preliminary request consistent with ODFW's expectations based on previous discussions with the applicant?
- Are the revegetation success criteria provided on page 5 of Attachment 4a of the preliminary request consistent with ODFW's expectations based on previous discussions with the applicant?

Note the proposed revegetation plan is in Part 1, starting at page 113 of the PDF, the proposed amendments to section D.8 of the site certificate are in Part 2, starting around page 60 of the PDF.

We also encouraged you to review and comment on any other information in Section 8.7 of the request, or other areas that may be of interest. Any comment you can provide by **June 7, 2019** would be appreciated. Please let us know if you need additional time.

Thank you, and please do not hesitate to contact me with any questions,



Christopher M. Clark

Siting Policy Analyst & Rules Coordinator

550 Capitol St. NE | Salem, OR 97301

P: 503-373-1033

P (In Oregon): 800-221-8035



Stay connected!

Attachment C: ~~Reserved for~~ Draft Proposed Order Comments/Index

In the Matter of Request for Amendment 11 to the
Port Westward Generating Project Site Certificate

)
) PROPOSED ORDER ON
) REQUEST FOR AMENDMENT 11 TO
) THE SITE CERTIFICATE
)

INDEX OF PUBLIC COMMENTS

	Commenter	Organization/Affiliation	Description	Date
1	Irene Gilbert	Individual, Friends of the Grande Ronde Valley	Oral Comment Provided at Public Hearing on Draft Proposed Order	9/26/19
2	Lenna Cope	Portland General Electric	Oral Comment Provided at Public Hearing on Draft Proposed Order	9/26/19
3	Karen Williams	Department of Environmental Quality	Written Comment	9/26/19
4	Erica Amt	Portland General Electric	Written Response to DEQ Comment	9/26/19
5	Irene Gilbert	Individual, Friends of the Grande Ronde Valley	Supplemental Materials related to Oral Comment; Letter from Legislative Counsel dated April 20, 2017	9/26/19
6	Irene Gilbert	Individual, Friends of the Grande Ronde Valley	Supplemental Materials related to Oral Comment; List of Rules and Statutes related to Oral Comments	9/27/19

CLARK Christopher * ODOE

From: WILLIAMS Karen <Karen.WILLIAMS@state.or.us>
Sent: Thursday, September 26, 2019 4:29 PM
To: CLARK Christopher * ODOE <Christopher.Clark@oregon.gov>
Subject: RE: Reviewing Agency Comment Request

Dear Christopher Clark,

I am sending this communication in response to Oregon Dept. of Energy's Notice of Request for Comments on construction and operation of a 4 to 6 MW battery energy storage system at Portland General Electric's Port Westward Generating Project. Program managers from air quality, water quality and environmental cleanup sections in DEQ's Northwest Region office reviewed the Notice.

Overall, the Notice does not provide sufficient project information for DEQ to identify all likely permitting issues and environmental concerns. However, the equipment providing power at the current facility is permitted under Title V Permit No. 05-2520 and Standard Air Contaminant Discharge Permit 05-2606. To ascertain any additional required permitting, DEQ would need information such as the battery content, any expected emissions from off-gassing, and any increase in power generating capacity.

If construction or operations would include activities that discharge to water, the facility may need a federal permit or license from the US Army Corps of Engineers, a permit from the Department of State Lands, and a 401 Water Quality Certification from DEQ. DEQ recommends that the applicant contact the USACE and DSL to determine if the project will require a permit.

Port Westward has a port-wide permit for wastewater and that permit may cover process wastewater from the proposed facility, if any, but DEQ cannot say that for certain with the information provided. Regarding stormwater and underground injection control (UIC) programs:

- If the proposed project will disturb an acre or more of soil, the project will need coverage under the construction stormwater general permit, 1200-C.
- If the proposed project has a Standard Industrial Code (SIC) that requires industrial stormwater permit coverage, the facility will need to apply for 1200-Z coverage or for an individual permit to manage industrial stormwater.
- If there are any UICs on site or any proposed to be installed, DEQ would require those UICs be Rule Authorized or permitted.

If ODOE or the applicant need additional information from DEQ, please call DEQ's Northwest Region at (503) 229 – 5696 and ask for the applicable program manager.

Thank you.

Karen Font Williams | North Coast Regional Solutions Liaison
DEQ Northwest Region
700 NE Multnomah St., Ste. 600 | Portland, OR 97232
(503) 229 – 5519

CLARK Christopher * ODOE

From: Erica Amt <Erica.Amt@pgn.com>

Sent: Thursday, September 26, 2019 6:46 PM

To: CLARK Christopher * ODOE <Christopher.Clark@oregon.gov>

Cc: WOODS Maxwell * ODOE <Maxwell.Woods@oregon.gov>; Lenna Cope <Lenna.Cope@pgn.com>

Subject: RE: Reviewing Agency Comment Request

Hi Chris,

We have had an opportunity to review DEQ's comments from Karen Font Williams. PGE's response is below.

During the RFA No. 11 preparation, we reviewed the required permits for construction of the battery energy storage system (BESS). The addition of the BESS does not require a modification to Port Westward's existing Title V Permit because the BESS will not increase generation of the thermal plant (e.g., no increase in heat rate or power generating capacity, etc.). Also, the BESS will use lithium ion batteries, which do not off gas.

Construction of the BESS will not disturb more than 1 acre, and therefore, will not require a 1200-C permit (see RFA No. 11, Table 3). Also, the BESS is an expansion of an existing facility with a SIC code that does not require a 1200-Z permit. However, all stormwater that enters the site is contained in on-site retention ponds that allow for infiltration and evaporation. Also, no UICs will be installed as a result of the BESS.

Construction of the BESS will not disturb any wetlands or waters of the state; consequently, no permits from USACE or DSL are required (see RFA No. 11, Table 3).

Please let me know if you have any questions.

Thank you,
Erica

Erica Amt

Environmental Specialist • 503-464-8310 (office) • 503-319-2743 (cell)

Portland General Electric 121 SW Salmon Street, 3WTC0403, Portland, OR 97204

CLARK Christopher * ODOE

Attachments: legislative council response federally threatened species.pdf

From: Irene Gilbert <ott.irene@frontier.com>

Sent: Thursday, September 26, 2019 5:41 PM

To: CORNETT Todd * ODOE <Todd.Cornett@oregon.gov>

Subject: legislative council letter and rule citations used in my presentation

Attached is the Barreto Letter.

The relevant rule for hazardous chemical protection changes is OAR 345-022-0022

The rule for T & E federal species is OAR 345-022-0070

The rule for Habitat protection is OAR 345-022-0060



STATE OF OREGON
LEGISLATIVE COUNSEL COMMITTEE

April 20, 2017

Representative Greg Barreto
900 Court Street NE H384
Salem OR 97301

Re: Department of Energy—Rule Review

Dear Representative Barreto:

You have asked our office to conduct a review, as provided in ORS 183.720, of OAR 345-021-0010 (1)(q), which was recently amended by the Energy Facility Siting Council (EFSC) to remove the requirement that developers identify federally protected threatened and endangered species in facility siting applications.¹ More broadly, however, we understand your question to be whether the recent rule change conflicts with federal law. In our opinion, OAR 345-021-0010 (1)(q) does not conflict with federal law. In addition, we believe a court would conclude that EFSC acted within its discretionary rulemaking authority when it amended its site certificate application rule.

1. Does the EFSC Rule Conflict with Federal Law?

Federal Law

The federal Endangered Species Act (federal ESA) is intended “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of [certain treaties and conventions listed in the Act].”² To enjoy the substantial protections afforded a species by the federal ESA, the species must first be listed as “threatened” or “endangered.”³ The National Marine Fisheries Service (NMFS) is responsible for oceangoing species and anadromous species listing under the authority of the Secretary of Commerce.⁴ The United States Fish and Wildlife Service (USFWS), under the authority of the Secretary of the Interior, is responsible for all other species not covered by NMFS jurisdiction.

Section 9 of the federal ESA prohibits the taking of a species listed as endangered or threatened.⁵ The term “take” is defined under the federal ESA to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”⁶ The term “harm,” furthermore, is defined to “include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior

¹ OAR 345-021-0010(1)(q).

² 16 U.S.C. 1531(b).

³ 16 U.S.C. 1533 (governing the listing of species).

⁴ *Id.*

⁵ 16 U.S.C. 1538(a)(1).

⁶ 16 U.S.C. 1532(19).

patterns, including breeding, feeding or sheltering.”⁷ The take prohibition applies to any “person,”⁸ including individuals, businesses and federal, state and local governmental bodies.⁹

Section 10 of the federal ESA provides a mechanism to allow private landowners to take threatened and endangered species “if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.”¹⁰ A private landowner can avoid potential liability for taking a threatened species by obtaining an incidental take permit (ITP).¹¹ In exchange for permission to “take” a listed species pursuant to an ITP, the permit applicant must commit to implementing a plan that “conserv[es]”—i.e., facilitates the recovery of—the species.¹² This plan is called a Habitat Conservation Plan (HCP) and it must delineate “the impact which will likely result from such taking” and the “steps the applicant will take to minimize and mitigate such impacts.”¹³

Oregon State Law

The Oregon Endangered Species Act (Oregon ESA) is far more limited in scope than its federal counterpart.¹⁴ The law provides for the state listing and conservation of threatened and endangered species. The Director of Agriculture or the State Fish and Wildlife Commission (FWC), as appropriate, determines which species are on the state lists.¹⁵ As a result, Oregon’s threatened and endangered species lists do not necessarily mirror the federal ESA lists. In fact, it is part of Oregon’s stated environmental policy to minimize duplication and overlap between state and federal laws dealing with threatened or endangered species.¹⁶ To that end, unlike the federal ESA which applies to individuals, businesses, and federal, state and local governmental bodies, the Oregon ESA generally focuses only on state lands and state management activities such as permitting.

Passed in 1987, the Oregon ESA underwent revisions that outlined listed species protection requirements in 1995.¹⁷ For threatened or endangered species listed by the state during or after 1996, the FWC is directed to establish by rule quantifiable and measurable guidelines that it considers necessary to ensure the survival of individual members of the species.¹⁸ The guidelines “may include take avoidance and protecting resource sites.”¹⁹ If a species is listed as threatened, state agencies are required to determine whether “a proposed action on land it owns or leases, or for which it holds a recorded easement, has the potential to violate the [survival] guidelines established” by the commission.²⁰ If the potential exists, the agency must work with the State Department of Fish and Wildlife (ODFW) to either pursue reasonable and prudent alternatives to the proposed action, or to take other actions to minimize adverse impacts on the affected species.²¹

⁷ 50 C.F.R. 17.3.

⁸ 16 U.S.C. 1538(a)(1).

⁹ 16 U.S.C. 1532(13).

¹⁰ 16 U.S.C. 1539(a)(1)(B).

¹¹ *Id.*

¹² *Id.*; 16 U.S.C. 1539(a)(2)(A); see also *Sierra Club v. U.S. Fish and Wildlife Serv.*, 245 F.3d 434, 441-442 (5th Cir. 2001) (“[c]onservation’ is a much broader concept than mere survival” because the “ESA’s definition of ‘conservation’ speaks to the recovery of a threatened or endangered species.”).

¹³ 16 U.S.C. 1539(a)(2)(A).

¹⁴ ORS 496.171 to 496.192.

¹⁵ ORS 496.176 (2), ORS 564.110 (2).

¹⁶ ORS 496.182 (1).

¹⁷ Chapter 590, Oregon Laws 1995.

¹⁸ ORS 496.182 (2)(a).

¹⁹ *Id.*

²⁰ ORS 496.182 (3).

²¹ ORS 496.182 (3), (4).

Like the federal ESA, the Oregon ESA prohibits the “take” of listed species.²² However, there is some ambiguity as to whether the take prohibition in the Oregon ESA applies to private parties. On the one hand, the Oregon ESA specifically provides that it is not “intended, by itself, to require an owner of any commercial forestland or other private land to take action to protect a threatened species or endangered species, or to impose additional requirements or restrictions on the use of private land.”²³ ODFW, however, has apparently interpreted this limiting provision narrowly, arguing that ORS 496.192 (1) does not provide private landowners with take authorization, but instead simply states that a private owner is not required to take affirmative steps to protect a listed species.²⁴ Application of the Oregon ESA take provisions to private parties has not been tested in court. The Oregon ESA does also include a process for FWC to issue incidental take permits.²⁵

Finally, although it was not adopted pursuant to the Oregon ESA, ODFW’s formal Fish and Wildlife Habitat Mitigation Policy plays an important role in ODFW and FWC implementing the Oregon ESA and in carrying out its duties under the other federal, state and local permitting processes. The policy is “to require or recommend, depending upon the habitat protection and mitigation opportunities provided by specific statutes, mitigation for losses of fish and wildlife habitat resulting from development actions.”²⁶ ODFW applies the policy when developing recommendations to other state, federal or local agencies regarding development actions for which “mitigation for impacts to fish and wildlife habitat is authorized or required by federal, state, or local environmental laws or land use regulations.”²⁷ Thus, despite the stated limitation of the Oregon ESA to state actions found in ORS 496.192 (1), ODFW’s implementation of its Fish and Wildlife Habitat Mitigation Policy serves as a mechanism for considering the effects of development actions on listed species, and often results in recommendations for mitigation that become incorporated into development permits and approvals for actions by private entities.

Energy Facility Siting

The Legislative Assembly has entrusted the EFSC with the authority to decide whether to issue an energy facility site certificate for a proposed project.²⁸ As part of this authority, the EFSC is tasked with adopting standards for the siting, construction and operation of energy facilities.²⁹ Although it is not required to do so, when establishing these standards the EFSC may consider the effects of the proposed facility on fish and wildlife, including threatened and endangered fish, wildlife or plant species.³⁰

OAR 345-022-0070 states that before the EFSC may issue a site certificate, it must find that the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of threatened or endangered species listed by the FWC and the Director of Agriculture.³¹ In addition, although not addressed in the EFSC rules or statutes, if the construction or operation of the proposed facility affects federally listed threatened or endangered species, the applicant

²² ORS 498.026.

²³ ORS 496.192 (1).

²⁴ David E. Filippi and Greg D. Corbin, “Federal and Oregon Endangered Species Acts” in *Environmental and Natural Resources Law*, at 43.38 (2002).

²⁵ ORS 496.172 (4); OAR 635-100-0170.

²⁶ OAR 635-415-0010.

²⁷ OAR 635-415-0015 (2).

²⁸ ORS 469.470 (1).

²⁹ ORS 469.501 (1).

³⁰ ORS 469.501 (1)(e).

³¹ OAR 345-022-0070.

may be required to apply separately to the Secretary of the Interior for an ITP under section 10 of the federal ESA in addition to the application to EFSC.³²

Despite the EFSC's recent rule change, applicants for energy facility site certificates must continue to identify *all* threatened and endangered species that may be affected by the construction and operation of the proposed facility, regardless of whether those species are listed on the federal or state list. First, the applicant must disclose any affected state listed species to the EFSC in Exhibit Q of its site certificate application.³³ Second, the applicant must identify all additional fish and wildlife species and habitat that may be affected by the project in Exhibit P of the site certificate application, which would include any federally listed species.³⁴ Third, if any of the potentially affected species are listed on the federal endangered or threatened species list, the federal ESA may require the applicant to apply separately to the Secretary of the Interior for an ITP.³⁵ Accordingly, the EFSC's recent rule change does not appear to be in conflict with any applicable federal laws because applicants must still identify *all* fish and wildlife species and habitat that may be affected by the project in the site certificate application. In addition, the federal ESA continues to apply to energy facility site certificate applicants.

2. ORS 183.720 Administrative Rule Review

As a member of the Legislative Assembly, you may request that the Legislative Counsel review an adopted rule of a state agency.³⁶ When reviewing a rule, the scope of review of this office is limited to:

- Determining whether the rule appears to be within the intent and scope of the enabling legislation purporting to authorize its adoption; and
- Determining whether the rule raises constitutional issues other than falling outside of the intent and scope of the law.³⁷

You have asked our office to review OAR 345-021-0010 (1)(q)(A), as amended effective March 8, 2017. OAR 345-021-0010 sets forth specific information that must be provided with applications for energy facility site certificates. Prior to March 8, 2017, OAR 345-021-0010(1)(q)(A) required applications to include:

Information about threatened and endangered plant and animal species that may be affected by the proposed facility . . . [b]ased on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172 (2), ORS 564.105 (2) or 16 USC Sec. 1533 that may be affected by the proposed facility.³⁸

ORS 496.172 (2) refers to Oregon's list of threatened and endangered wildlife species, as identified by the FWC. ORS 564.105 (2) refers to Oregon's list of threatened and endangered

³² 16 U.S.C. 1539(a)(1)(B).

³³ OAR 345-021-0010 (1)(q).

³⁴ OAR 345-021-0010 (1)(p).

³⁵ 16 U.S.C. 1539(a)(1)(B).

³⁶ ORS 183.720.

³⁷ ORS 183.720 (3).

³⁸ OAR 345-021-0010(1)(q)(A) (prior to March 8, 2017).

native plant species, as identified by the Director of Agriculture. 16 U.S.C. 1533 refers to the list of threatened and endangered species under the federal ESA.

As of March 8, 2017, OAR 345-021-0010(1)(q) no longer requires applicants to identify threatened or endangered species under the federal ESA that may be affected by the proposed facility.

In determining whether a rule is within the “intent and scope” of the enabling legislation, Legislative Counsel is directed to “follow generally accepted principles of statutory construction.”³⁹ Accordingly, the text of the statute is the principal guide in determining whether or not the agency is authorized to make the rule.

The EFSC offers ORS 469.470 and 469.501 as the statutory authority for its rulemaking. ORS 469.470 provides that the EFSC shall:

In accordance with the applicable provisions of ORS chapter 183, and subject to the provisions of ORS 469.501 (3), adopt standards and rules to perform the functions vested by law in the council including the adoption of standards and rules for the siting of energy facilities pursuant to ORS 469.501, and implementation of the energy policy of the State of Oregon set forth in ORS 469.010 and 469.310.⁴⁰

ORS 183.332 provides that it is the policy of the State of Oregon that agencies attempt to adopt rules that correspond with equivalent federal laws and rules unless, among other exceptions, there is specific statutory direction to the agency that authorizes the adoption of the rule.⁴¹ Oregon’s energy policy set forth in ORS 469.010 and 469.310 makes no direct reference to the federal ESA, but does indicate that the siting, construction and operation of energy facilities shall be consistent with the environmental policies of this state.⁴² With respect to endangered species, it is state policy to minimize duplication and overlap between state and federal laws dealing with threatened or endangered species.⁴³

ORS 469.501 provides, in pertinent part, that the EFSC shall adopt standards for the siting of facilities and that such standards “may address but need not be limited to the . . . [e]ffects of the facility, taking into account mitigation, on fish and wildlife, including threatened and endangered fish, wildlife or plant species.”⁴⁴ The use of the words “may address” in ORS 469.501 (1) demonstrates that the legislature intended the council to have discretion regarding the creation of its permitting standards.⁴⁵

Pursuant to this discretionary rulemaking authority, the EFSC enacted OAR 345-022-0070 which limits the issuance of site certificates to projects that are “not likely to cause a significant reduction in the likelihood of survival or recovery of” state listed threatened or endangered species.⁴⁶ The rule at issue here, OAR 345-021-0010 (1)(q), promulgated under the same rulemaking authority, previously required site certificate applicants to identify both federal

³⁹ ORS 183.720 (4).

⁴⁰ ORS 469.740 (2).

⁴¹ ORS 183.332 (1).

⁴² ORS 469.310.

⁴³ ORS 496.182 (1).

⁴⁴ ORS 469.501 (1).

⁴⁵ *Save Our Rural Oregon v. Energy Facility Siting Council (In re COB Energy Facility)*, 339 Or. 353, 377 (2005).

⁴⁶ OAR 345-022-0070.

and state listed threatened and endangered species that may be affected by the proposed facility in Exhibit Q of the site certificate application. Presumably, OAR 345-021-0010 (1)(q) was enacted to require applicants to provide EFSC with the information it needs to comply with OAR 345-022-0070; however, OAR 345-022-0070 does not apply to federally listed threatened and endangered species. Accordingly, in March, the EFSC amended OAR 345-021-0010 (1)(q) to remove the requirement that developers identify federally listed threatened and endangered species in Exhibit Q. Nevertheless, developers must still identify state listed threatened and endangered species in Exhibit Q. Furthermore, developers must still identify any other fish and wildlife species and habitat which may be affected by the proposed project (which would include any affected federally listed species) in Exhibit P of the site certificate application.⁴⁷

The EFSC is tasked with prescribing standards and rules for the siting of facilities under ORS 469.470 and 469.501. The only reference in either ORS 469.470 or 469.501 to endangered or threatened species is in ORS 469.501 (1) regarding the discretionary authority of the EFSC to develop standards regarding the effects of proposed facilities on fish and wildlife, including threatened or endangered species. Accordingly, we believe that the EFSC's removal of the requirement in OAR 345-021-0010 (1)(q)(A) that applicants for site certificates identify federally listed threatened or endangered species in Exhibit Q of the site certificate application meets the EFSC's duties to prescribe standards and rules for the siting of facilities under ORS 469.470 and 469.501 because there is no express statutory requirement that EFSC consider federally listed threatened and endangered species when it issues site certificates. Furthermore, EFSC still requires applicants to identify state and federally listed species on site certificate applications, albeit in different exhibits. For these reasons, we conclude that the rule adopted by the EFSC falls under the broad rulemaking authority of the EFSC, is within the intent and scope of the enabling legislation and does not raise any additional constitutional issues.

The opinions written by the Legislative Counsel and the staff of the Legislative Counsel's office are prepared solely for the purpose of assisting members of the Legislative Assembly in the development and consideration of legislative matters. In performing their duties, the Legislative Counsel and the members of the staff of the Legislative Counsel's office have no authority to provide legal advice to any other person, group or entity. For this reason, this opinion should not be considered or used as legal advice by any person other than legislators in the conduct of legislative business. Public bodies and their officers and employees should seek and rely upon the advice and opinion of the Attorney General, district attorney, county counsel, city attorney or other retained counsel. Constituents and other private persons and entities should seek and rely upon the advice and opinion of private counsel.

Very truly yours,

DEXTER A. JOHNSON
Legislative Counsel



By
Lori Anne Sills
Staff Attorney

⁴⁷ OAR 345-021-0010 (1)(p).

CLARK Christopher * ODOE

From: Irene Gilbert <ott.irene@frontier.com>
Sent: Friday, September 27, 2019 7:56 AM
To: CORNETT Todd * ODOE; CLARK Christopher * ODOE
Subject: rule references.
Attachments: Rules and Statutes forming basis for my comments.docx

Attached is a list of the rules related to the comments I made yesterday regarding the amended site certificate for Port Westward, Amendment II.

Statutes and Rules relating to my comments regarding Port Westward Generating Amendment II.

ORS 469.501(e) provides authorization to address the effect of the facility on fish and wildlife

OAR 345-022-0070 Threatened and Endangered Species Rules:

While the rule change that removed consideration of federally protected species under this rule was determined by Oregon Legislative Council opinion as not creating a conflict with federal law, that evaluation was based upon the statement that the federally protected species continue to be required to be addressed

OAR 345-022-0060 Habitat Mitigation Rule. This rule applies to habitat protection for all wildlife utilizing the site. That includes federally protected, state protected as well as species not specifically identified but which fall under ODFW requirement to manage all wildlife. Habitat which is not being addressed due to changes in the site certificate include raptor nest sites, Columbia deer, and riparian areas which provide habitat for multiple species. Removing the setback from water for hazardous chemicals conflicts with requirements to protect habitat or provide mitigation effective for the life of the project.

The rule referenced stating that control of noxious weeds must continue for the life of the development is addressed in ORS 569.390 which requires the person owning or occupying land to control noxious weeds to the extent that they are not allowed to go to seed. This requirement does not end after 5 years. It extends for the life of the project.

Attachment D: Draft Amended Revegetation and Noxious Weed Control Plan

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**Revegetation and ~~Invasive Species Monitoring~~ Noxious
Weed Control Plan
Port Westward Generating Project**

Submitted by:

Portland General Electric

~~October 2006~~ Revision 1, April 2019

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1.0 INTRODUCTION

Portland General Electric Company (PGE) began commercial operation of Unit 1 of the Port Westward Generating Project (PGWP Unit1) in June 2007. Construction of PGWP Unit 2 began in May 2013 and the project started commercial operation on December 30, 2014. Major soil disturbance activities associated with plant site preparation and construction included rough grading, excavation, filling, stockpiling, and final grading. Following the completion of construction activity, erosion control and revegetation measures were conducted as required in the original site certificate (Unit 1) and tenth amended site certificate (Unit 2) issued by the Oregon Energy Facility Siting Council (OR-EFSC 2006, 2013) and consistent with the project Erosion and Sediment Control Plan and the original Revegetation and Invasive Species Monitoring Plan (RISMP, PGE 2006).

Revegetation and monitoring of temporary disturbance areas associated with PGWP Unit 1 was conducted in 2007 through 2011 (PGE 2011). Monitoring of PWGP Unit 2 temporary disturbance areas is in progress, with the initial five-year monitoring program to be completed in 2019 (PGE 2018).

Construction of PGWP Unit 2 began in May 2013 and the project started commercial operation on December 30, 2014. Major soil disturbance activities associated with plant site preparation and construction included rough grading, excavation, filling, stockpiling, and final grading. Following the completion of construction activity, erosion control and revegetation measures were conducted as required in the tenth Amended Site Certificate issued by the Oregon Energy Facility Siting Council (OR-EFSC 2013) and consistent with the project's Erosion and Sediment Control Plan (Black and Veatch 2013) and the Revegetation and Invasive Species Monitoring Plan (RISMP, PGE 2006).

~~Portland General Electric is scheduled to complete construction of the Port Westward Generating Project by March 2007. Construction site preparation activities included installing stone columns, clearing and grubbing, and excavation work. Subsequent construction and site stabilization activities include constructing new structures and equipment, installing buried water and gas lines, regrading the site, installing a plant access road, seeding soil disturbance areas outside of the power block area, and putting down aggregate surfacing inside the power block area. Soil disturbing activities include rough grading, excavation, filling, stockpiling, and final grading. The above construction activities, including equipment staging areas, construction trailers and temporary parking areas occur over approximately 20 acres at the immediate plant construction site. Potential soil disturbance areas also include approximately 14 acres of pipeline corridor, and a 13.5 acre spoils stockpiling and disposal site.~~

~~The Port Westward to Trojan Transmission Line portion of the Project will be completed by October 31, 2006. Transmission line construction consisted of right of way clearance, erecting steel transmission towers on concrete piers, and stringing conductors between towers. Ground-disturbing construction activities consisted of minor leveling, foundation excavation, concrete placement, pulling of conductor wire, and associated construction vehicle disturbance and staging of equipment/materials. Total work area along the right of way, including soil disturbance areas, staging areas and work areas, is estimated to be 24 acres, distributed among 103 tower foundation sites. There also were some limited soil disturbance impacts and vegetation~~

~~clearing in riparian areas associated with right of way clearance and temporary stream crossings for construction vehicles.~~

~~During all construction activity, PGE implemented mitigation measures as required by the Project Site Certificate issued by the Oregon Facility Siting Council and as described in the Generating Plant and Transmission Line Sediment and Erosion Control Plans. The Project Site Certificate includes specific measures for revegetation of soil and riparian disturbance areas following completion of the Project. The Site Certificate also requires follow-up monitoring of soil and riparian disturbance areas for revegetation success, soil erosion issues, and invasive plant species.~~

~~This revised revegetation monitoring plan This Revegetation and Invasive Species Monitoring Plan will apply to completion of revegetation monitoring for Unit 2 construction as well as revegetation and monitoring of any additional temporary disturbance areas that result from construction of the Port Westward Battery Storage project (Amendment 11) covers the Port Westward Generating Project, including the generating plant construction site, associated pipeline construction, and the Port Westward to Trojan Transmission line. The plan reviews revegetation measures conducted to date, specifies methods and schedule for evaluating the success of revegetation measures and implementing follow-up remedial measures (reseeding, replanting of native woody species, and invasive species control) as necessary, and details revegetation success criteria and reporting requirements. As required by the Site Certificate, the plan is being submitted for approval by the Oregon Department of Energy (Department) as required by the Site Certificate, prior to commencement of monitoring work.~~

2.0 REVEGETATION MEASURES

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Following construction, PGE ~~will~~ implemented the revegetation measures stipulated in the Site Certificate. As appropriate at specific locations, revegetation measures included:

- Reseeding of all soil disturbance areas to restore vegetation;
- Application of mulch and straw wattles to prevent soil erosion during vegetation re-establishment;
- ~~Revegetation of disturbed riparian areas with appropriate plant species;~~
- ~~Planting of native woody species (according to the Typical Re-vegetation Plan, ASC, Exhibit Q, Page Q-6.1) in riparian shrub and forest habitat where canopy cover of less than 25 percent resulted from construction impacts.~~

~~PGE plans to use the following seed mix for revegetation of any upland disturbance areas associated with the battery storage project or for any necessary follow-up seedings of the Unit 2 revegetation areas. This seed mix may be changed with concurrence of Prior to reseeding disturbance areas, PGE obtained Oregon Department of Fish and Wildlife (ODFW) and the Department, concurrence for the use of the following seed mixes as appropriate for each disturbance site:~~

Riparian Area Mix Upland Mix (50% grasses, 35% perennial flowers, 15% annual flowers)

California Brome - *Bromus carinatus*

California oatgrass (*Danthonia californica*)

Red fescue (*Festuca rubra*)

Streambank Lupine - *Lupinus rivularis*

California Poppy - *Eschscholzia californica*

Farewell to Spring - *Clarkia amoena*

Western Yarrow - *Achillea millefolium*

Lance Self-heal - *Prunella vulgaris v. lanceolata*

Baby Blue Eyes - *Nemophila menziesii*

46% Blue Wildrye

38% Native Red Fescue

12% Tufted Hairgrass

-2% Western Mannagrass

-2% American Sloughgrass

40% Delaware Dwarf Perennial Ryegrass

20% Creeping Red Fescue

20% Annual Ryegrass

10% Highland Bentgrass

10% New Zealand White Clover

Riparian and/or upland mix

60% Blue Wildrye

30% Native Red Fescue

10% California Brome

Pasture mix

30% Orchardgrass

30% Perennial Ryegrass

20% Bronson Tall Fescue

10% Annual Ryegrass

-5% Tuuka Timothy

-5% Kentucky Bluegrass

Erosion Control Mix

3.0 MONITORING METHODS AND SCHEDULE

During the 12 months following completion of construction for each project phase (i.e. transmission line and generating plant), at least two surveys will be conducted of all construction disturbance areas to evaluate the success of revegetation measures and identify any soil erosion concerns. Annual surveys will be conducted for a period of five years to monitor revegetation success and invasive species control needs at the plant construction site and at riparian areas disturbed during transmission line construction. All temporary disturbance areas impacted by project construction. The five-year monitoring period for Unit 2 disturbance areas will be completed in 2019, after which PGE will consult with ODFW and ODOE regarding success criteria (See Section 5.0).

3.1 Initial Monitoring Survey (January/February 2007)

Following approval of this plan by the Department, PGE will conduct an initial monitoring survey of transmission line construction disturbance areas and any soil disturbance areas at the generating plant site where construction has been completed to date. All revegetation construction areas will be visually surveyed by a qualified PGE biologist. During the first each annual monitoring visit, the surveyor will collect the following information:

Port Westward Generating Project
Monitoring/Noxious Weed Control Plan

Revegetation and Invasive Species

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- Confirmation that all areas requiring revegetation have been seeded;
- Success of vegetation establishment as measured by:
 - a) Percent total-vegetative cover by species; percent bare soil; and percent other ground covers (i.e., gravel or litter) (ocular estimate using 10, randomly-located, 1m² sampling quadrats in each revegetation area). Paired plots may also be used to compare sampling results to vegetation in nearby undisturbed areas;
 - b) Percent bare soil (ocular estimate);
- Presence of invasive plant species (species listed as noxious under the Oregon Department of Agriculture Noxious Weed Control Program), and density estimates by species if present (in sampling quadrats and overall ocular estimated by revegetation area);
- Presence of erosion problems that require further mitigation measures ; and,
- ~~Status of native woody species plantings in riparian corridors,~~
 - a) ~~Confirmation of adequate initial planting density;~~
 - b) ~~Percent survival of planted native woody species.~~

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3.2 Second Monitoring Survey (May-June 2007)

All construction disturbance areas will be surveyed in spring 2007 to confirm vegetation establishment and note any areas that require further measures. Data collection will consist of the same information collected during the initial survey. This survey will also serve as the first of five annual monitoring surveys for revegetation success and invasive plant species in riparian revegetation areas (annual surveys described below).

3.3 Third Monitoring Survey (as required)

This monitoring survey will be conducted at all areas where less than two surveys have been conducted to date (such as generation plant areas that were not covered in the November-December 2006 surveys), and at any sites where ongoing problems exist (i.e., soil erosion problems, significant areas of bare soil where seeded vegetation failed to establish, less than 80 percent survival of planted native woody species in riparian areas). This survey will focus on ensuring that all sites have been properly stabilized and revegetated prior to the 2007-2008 rainy season.

3.4 Annual Monitoring Surveys

Starting in 2007, PGE will conduct annual surveys for five years. Surveys will be conducted in the spring (May/June) of each year. The purpose of the surveys will be to:

- 1) ~~Monitor the success of riparian area revegetation efforts; and,~~
- 2) ~~Monitor for the presence of invasive plant species in 1) riparian areas and wetlands along the transmission line right of way, and 2) in areas temporarily disturbed by construction of the~~

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raw water, gas, and process water discharge lines, in the temporary construction staging and laydown area northwest of the energy facility site, and in the soils disposal site.

Annual surveys will be conducted by a qualified PGE biologist, and the following information will be collected:

- ~~Percent survival of planted native woody species;~~
- ~~Presence of erosion problems that require further mitigation measures; and,~~
- ~~Presence of invasive plant species and density estimates by species if present.~~

4.0 FOLLOW-UP RESTORATION MEASURES

Following each of the surveys described above, PGE will conduct follow-up measures as needed to address remaining soil impacts and revegetation requirements not achieved through initial plantings. Such follow-up measures may include:

- Reseeding of select areas where significant areas of bare soil remain after establishment of initial seeding;
- ~~Planting of additional native woody species in riparian revegetation areas where an 80 percent survival was not achieved; and,~~
- Control of invasive plant species by qualified personnel using appropriate methods for the target species (i.e. herbicides applied per label requirements if herbicides required).

5.0 REVEGETATION SUCCESS CRITERIA

Revegetation will generally be considered successful when the revegetated areas support non-noxious plant communities that are at a minimum similar in vegetation percent cover and erosion potential comparable to surrounding undisturbed areas. When the site certificate holder determines that an area of the project has been successfully restored by satisfying all success criteria, this will be stated in the annual revegetation report. If ODFW and the Department concur, the site certificate holder will conclude that it has no further obligation to perform revegetation activities in that area of the project.

The goal for each soil disturbance site will be a minimum of 80 percent vegetation cover (of seeded vegetation and desirable, naturally-recruiting species and excluding invasive plant/noxious weed cover) and no ongoing erosion issues. Reseeding or replanting efforts will occur, in consultation with ODFW and the Department, in any area where monitoring identifies a restoration failure.

The following criteria will be used to determine success of revegetation efforts:

1. The vegetation percent cover by native species and desirable non-native species (i.e., non-noxious weeds, both seeded and naturally recruited) is 80 percent or more, or the native species component is not significantly less than the native species percent cover of surrounding undisturbed areas.
2. Noxious weeds are absent or constitute only a small percentage (<5%) of vegetation otherwise dominated by native or desirable non-native species.
3. The percentage of bare soil (excluding rocky areas) in the sample plot is <10%, or not

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significantly greater than the percentage of bare soil in surrounding undisturbed areas.

4. Vegetation percent cover goals may be adjusted to match the typical percent cover in nearby undisturbed areas as measured with paired monitoring plots.

5.06.0 REPORTING SCHEDULE

Beginning in 2007 and continuing through 2010, Within one year after completion of construction of any phase of the facility PGE shall provide a summary report to ODFW and the Department that identifies the revegetation actions it took and the results of revegetation monitoring conducted to that time. PGE will submit an annual report to ODFW and the Department by December 31 of each year during the five-year monitoring period required for each revegetation area. In 2011, The final annual report will be submitted within three months of the final annual monitoring survey, as required in the Site Certificate. The Annual reports will identify revegetation actions taken in construction disturbance areas at the Port Westward Generating Project, the results of vegetation monitoring, and invasive species control measures implemented to date. The final annual report will document achievement of success criteria, or, if criteria have not been met, propose additional mitigation and monitoring measures to be implemented.

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7.0 AMENDMENT OF PLAN

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this Plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this Plan agreed to by the Department.

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