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7 **NINTH AMENDED**
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9 **SITE CERTIFICATE**
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11 **FOR THE**
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13 **PORT WESTWARD GENERATING PROJECT**
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**NINTH 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; and (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 [Amendments No. 1, 2, 3, 4, 5, 6, 7, 8 & 9]. Collectively, we refer to the Final Orders listed in (a) through (j) as "the Orders".

In interpreting this site certificate, any ambiguity shall be clarified by reference to, and in the following priority: this Site Certificate, the record of the proceedings which led to the Orders, and the Application for a Site Certificate for the Port Westward Generating Project. As used in this Site Certificate, the "application for site certificate" or the "ASC" includes: (a) the Application for a Site Certificate for the Port Westward Generating Project, which the Department of Energy ("Department") filed on April 11, 2002; (b) the

1 Certificate Holder's Request for First Amendment to the Site Certificate for the Port
2 Westward Generating Project, which the Council received on October 25, 2003; (c) the
3 Certificate Holder's Request for Second Amendment to the Site Certificate for the Port
4 Westward Generating Project, which the Council received on May 7, 2004; (d) the
5 Certificate Holder's Request for Third Amendment to the Site Certificate for the Port
6 Westward Generating Project, which the Council received on November 3, 2004, (e) the
7 Certificate Holder's Request for Fourth Amendment to the Site Certificate for the Port
8 Westward Generating Project, which the Council received on January 18, 2006, (f) the
9 Certificate Holder's Request for Fifth Amendment to the Site Certificate for the Port
10 Westward Generating Project, which the Council received on July 18, 2006, (g) the
11 Certificate Holder's Request for Sixth Amendment to the Site Certificate for the Port
12 Westward Generating Project, which the Council received on November 7, 2008, (h) the
13 Certificate Holder's Request for Seventh Amendment to the Site Certificate for the Port
14 Westward Generating Project, which the Council received on September 18, 2009, (i) the
15 Certificate Holder's Request for the Eighth Amendment to the Site Certificate for Port
16 Westward Generating Project, which the Council received on November 4, 2010, and (j)
17 the Certificate Holder's Request for the Ninth Amendment to the Site Certificate for Port
18 Westward Generating Project, which the Council received on October 30, 2012.
19 [Amendments 1 through 9].
20

21 The terms used in this Site Certificate shall have the same meaning set forth in ORS
22 469.300, 469.503(2)(e) and Oregon Administrative Rules (OAR) 345-001-0010, except
23 where otherwise stated or where the context clearly indicates otherwise.
24

25 **B. SITE CERTIFICATION**

- 26 1. To the extent authorized by State law and subject to the conditions set forth
27 herein, the State approves and authorizes the Certificate Holder to construct,
28 operate and retire a natural gas-fired, combined cycle combustion turbine energy
29 facility, together with certain related or supporting facilities, at the site as
30 described in Section C of this Site Certificate, near Clatskanie, Oregon. ORS
31 469.401(1).
32
- 33 2. This site certificate shall be effective (1) until it is terminated pursuant to OAR
34 345-027-0110 or the rules in effect on the date that termination is sought, or (2)
35 until the Site Certificate is revoked pursuant to ORS 469.440 and OAR 345-029-
36 0100 or the statutes and rules in effect on the date that revocation is ordered. ORS
37 469.401(1).
38
- 39 3. This Site Certificate does not address, and is not binding with respect to, matters
40 that were not addressed in the Council's Final Order. These matters include, but
41 are not limited to: building code compliance, wage, hour and other labor
42 regulations, local government fees and charges, and other design or operational
43 issues that do not relate to siting the Project; and permits issued under statutes and
44 rules for which the decision on compliance has been delegated by the Federal
45 government to a state agency other than the Council. ORS 469.401(4) and
46 469.503(3).

4. Both the State and the Certificate Holder shall abide by local ordinances and state law and the rules of the Council in effect on the date this Site Certificate is executed. In addition, upon a clear showing of a significant threat to the public health, safety or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules. ORS 469.401(2).
5. For a permit, license or other approval addressed in and governed by this Site Certificate, the Certificate Holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules. ORS 469.401(2).
6. Subject to the conditions herein, this Site Certificate binds the State and all counties, cities and political subdivisions in this state as to the approval of the site and the construction, operation and retirement of the Project as to matters that are addressed in and governed by this Site Certificate. ORS 469.401(3).
7. Each affected state agency, county, city and political subdivision in Oregon with authority to issue a permit, license or other approval addressed in or governed by this Site Certificate shall, upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this Site Certificate. ORS 469.401(3).
8. After issuance of this Site Certificate, each state agency or local government agency that issues a permit, license or other approval for the Project shall continue to exercise enforcement authority over such permit, license or other approval. ORS 469.401(3).
9. After issuance of this Site Certificate, the Council shall have continuing authority over the site and may inspect, or direct the Department to inspect, or request another state agency or local government to inspect, the site at any time in order to assure that the Project is being operated consistently with the terms and conditions of this Site Certificate. ORS 469.430.
10. The Certificate Holder may develop the energy facility in two phases. Phase 1 would consist of the southernmost generating unit ("Unit 1"), including one combustion turbine generator, heat recovery steam generator, steam generator, one step-up transformer bank, auxiliary transformer, and cooling tower. Phase 1 would also include all of the energy facility components common to the two units and the related or supporting facilities. Phase 2 would consist of the northernmost generating unit ("Unit 2") and its associated facilities. All conditions of this Site Certificate apply equally to Phase 1 and Phase 2, unless a condition specifies different obligations for Phase 1 or Phase 2. [Amendments No. 1 & 3]

1 **C. SITE DESCRIPTIONS**

2
3 **C.1. FACILITY**

4
5 **C.1.a. Major Structures and Equipment**

6
7 **Major Structures and Equipment.** The net electric power output of the energy facility
8 will be about 650 MW comprised of base load generation, power augmentation (i.e., duct
9 burning and non-base load generation.) The power augmentation and non-base load
10 generation provide flexible peaking, load-following, and wind integration services that
11 are needed to maintain a reliable and stable utility system. [Amendment No. 7]
12

13 Unit 1 of the energy facility will consist of one heavy-duty frame-type combustion
14 turbine generator (Mitsubishi G Class), one heat recovery steam generator ("HRSG"),
15 and one steam turbine. It will burn natural gas in the combustion turbine and duct
16 burners. Expanding gases from combustion will turn the rotor within the turbine that is
17 connected to an electric generator. The hot gases exhausted from the combustion turbine
18 and duct burners will be used to raise steam in the HRSG. Steam from the HRSG will be
19 expanded through the steam turbine driving its own electric generator. [Amendments No.
20 1 & 7.]
21

22 For Unit 1, the combustion turbine will be housed in a turbine building that provides
23 thermal insulation, acoustical attenuation and fire extinguishing media containment. The
24 turbine building, occupying a footprint measuring about 250 feet by 250 feet and standing
25 about 90 feet high, will also house the steam turbine generator, condenser and
26 balance of plant equipment. The enclosure will allow access for routine inspection and
27 maintenance. The administration building, occupying a footprint measuring about 110
28 feet by 140 feet and standing about 30 feet high, includes the control room and
29 administrative offices. [Amendment No. 7]
30

31 For Unit 1, the HRSG will occupy a footprint measuring about 50 feet by 150 feet and
32 will stand about 110 feet high. A stack will be provided for the HRSG. The stack will be
33 about 36 feet in diameter and 200 feet high. [Amendment No. 7]
34

35 For Unit 2, aeroderivative combustion turbine generators will be equipped with outdoor
36 enclosures with thermal insulation, acoustical attenuation and fire extinguishing media
37 containment. Reciprocating engine generators will be housed in an engine building,
38 occupying a footprint measuring up to 100 feet by 500 feet and standing about 30 to 40
39 feet high. [Amendment No. 7]
40

41 Six transformers will step-up the generator voltages to the substation voltage of 230
42 kilovolts ("kV"). Two auxiliary transformers will supply power for plant auxiliary loads.
43 [Amendments No. 1 & 7]
44

45 Two mechanical-draft cooling towers will be used to remove the waste heat from the
46 main condenser and the plant auxiliary heat exchangers. The cooling towers and

1 circulating water pumps will cover an area of about 75 feet by 650 feet and will stand
2 about 50 feet high. [Amendment No. 7]

3
4 A switchyard or dead-end transmission structure will interconnect the plant's output to
5 the 230-kV transmission network. The switchyard footprint will measure about 300 feet
6 by 500 feet. [Amendment No. 1]

7
8 An auxiliary boiler will supply steam for plant start-ups and short duration shut-downs.
9 The auxiliary boiler will be fueled with natural gas. [Amendment No. 3]
10 Additional facilities will include: a plant services/warehouse building, a boiler feed pump
11 building; a fire water pump building; a water treatment building; a clarifier; a settling
12 basin; a condensate tank, a fire water/service water storage tank and two demineralized
13 water storage tanks (440,000 gallon and 1,100,000 gallon capacity respectively);
14 lubricating oil tanks; a natural gas metering station; natural gas compressor stations with
15 electric compressors of 1,000 to 7,000 horsepower total, enclosed in buildings with
16 acoustical insulation; and, aqueous ammonia storage tanks (each with up to 70,000-gallon
17 capacity and equipped with containment). [Amendments No. 1 & 7]

18
19 Natural gas will not be stored at the energy facility site. Diesel fuel for the fire pumps and
20 reciprocating engine micro-pilot systems will be stored in aboveground tanks. Water
21 treatment chemicals will be stored in permanent aboveground storage tanks or portable
22 plastic tanks (totes). To prevent storm water runoff from chemical storage, all fuel and
23 chemical storage will be inside buildings or under cover in paved areas with a curb. All
24 individual spill containment areas will be designed to hold at least 110 percent of the
25 volume of liquids stored within them. [Amendment No. 7]

26
27 A complete fire protection system will be installed within the buildings and yard areas at
28 the energy facility site. The system will be designed to meet the requirements of the
29 Uniform Fire Code, as amended by Oregon and the National Fire Protection Association,
30 and all other applicable fire protection standards. The fire protection system will include
31 a fire water system, a dry chemical extinguishing system, a carbon dioxide ("CO₂")
32 extinguishing system, and portable fire extinguishers. The road system within the energy
33 facility site will be designed for access by large trucks needed for equipment and material
34 deliveries. The minimum turning inside radius for roads will be 40 feet.

35
36 The fire water system will include a fire water supply loop, fire hydrants, sprinkler
37 systems, and hoses placed at appropriate locations. Reserved capacity in the 180,000-
38 gallon fire water/service water storage tank will serve as the firewater source.

39
40 The combustion turbine enclosures will be protected by foam or CO₂ systems. If the
41 systems were to activate, an alarm will sound and/or a visual indicator will light up on the
42 gas turbine control panel.

43
44 Portable fire extinguishers will be placed at key locations within the energy facility site.
45 The type and number of portable fire extinguishers will conform to applicable code
46 requirements.

1
2 The Certificate Holder may develop the whole facility at the same time or it may develop
3 only one of the generating units and the related or supporting facilities ("Phase 1") or the
4 two units of the energy facility in two distinct phases ("Phase 1" and "Phase 2"). As
5 referred to in this Site Certificate, the Certificate Holder would develop Phase 1 first if it
6 develops the energy facility in phases. Phase 1 would consist of the southernmost
7 generating unit ("Unit 1"), including a combustion turbine generator, heat recovery steam
8 generator, steam generator, one step-up transformer bank, auxiliary transformer, and
9 cooling tower. Phase 1 would also include all of the energy facility components common
10 to the two units and the related or supporting facilities. [Amendments No. 1 & 3]
11

12 **Output.** The net electric power output of the energy facility will be up to 650 MW,
13 comprised of base load generation, power augmentation (i.e. duct burning), and non-base
14 load generation. The power augmentation and non-base load generation provide flexible
15 peaking, load-following, and wind integration services that are needed to maintain a
16 reliable and stable utility system. [Amendments No. 1, 3 & 7]
17

18 The Certificate Holder proposes to operate Unit 1 with power augmentation technologies
19 for 3,000 hours annually on average. The Certificate Holder proposes to operate Unit 2 as
20 a non-base load power plant. [Amendments No. 1,3 & 7]
21

22 **Fuel Use.** The energy facility will use natural gas as the only fuel to power the turbines
23 and the power augmentation technologies. It will use up to approximately 4,700 MMBtu
24 per hour of natural gas at full load with the duct burners in operation at the average
25 annual site condition. [Amendments No. 1, 3 & 7]
26

27 **Water Use.** The energy facility will obtain water to generate steam and to cool the steam
28 process from an existing PGE intake structure on the Bradbury Slough of the Columbia
29 River. For Unit 1, the Certificate Holder obtained a permanent transfer of 5.4 cfs of a
30 water right associated with PGE's Trojan Nuclear Plant, Certificate No. 81969. For Unit
31 2, PGE will obtain a permanent transfer of an additional 3.0 cfs under the same water
32 right.¹ [Amendments No. 1, 3 & 7]
33

34 Average water demand over the at the energy facility will be about 2,800 gallons per
35 minute ("gpm"), or 4.03 million gallons per day ("gpd"). Peak water demand will be
36 about 3,770 gpm, 5.4 million gpd, or 8.4 cubic feet per second ("cfs"). [Amendments
37 No.1,3 & 7]
38

39 PGE owns and operates an existing intake structure on the Bradbury Slough, which will
40 be the authorized point of diversion for surface water rights transferred for use at the
41 energy facility site. To serve the energy facility, PGE will place additional pumps within
42 the existing intake facility. PGE will employ fish screens compliant with National Marine
43 Fisheries Service ("NMFS") screening criteria and Oregon Department of Fish and
44 Wildlife ("ODFW") criteria. [Amendments No. 1 & 7]

¹ WRD will issue the transferred water right a new number, replacing #81969

1
2 **Wastewater.** Process blowdown is washdown water, filter backwash or other non-
3 sanitary liquid waste produced within the energy facility. The average volume of process
4 blowdown for both units combined will be about 30 gpm. Cooling system blowdown is
5 water withdrawn from the cooling system to control the buildup of dissolved salts. The
6 average volume of cooling system blowdown for both units combined will be about 970
7 gpm, but it could vary depending on the quality of the river water supply. The energy
8 facility will discharge its process and cooling system blowdown to the Columbia River
9 under a National Pollution Discharge Elimination System ("NPDES") permit that the
10 Port of St. Helens has requested from DEQ. [Amendments No. 1 & 7].
11

12 The Certificate Holder will discharge sanitary sewage to an engineered septic tank and
13 drain field at a rate of about 500 gallons per day, as permitted by a Water Pollution
14 Control Facilities permit. The Certificate Holder will route storm water from roofs and
15 paved areas to pervious areas to percolate into the shallow groundwater.
16

17 **C.1.b. Related or Supporting Facilities**

18 The energy facility will include the following related or supporting facilities:
19

20 **Natural Gas Pipelines.** Natural gas will fuel the combustion turbine generators and duct
21 burners. The energy facility will be served by the Kelso-Beaver Pipeline, an existing
22 FERC-regulated interstate pipeline with a current capacity of 193,000 decatherms per
23 day. PGE owns the pipeline jointly with two other parties. To create the additional
24 capacity that will be required to serve the energy facility, PGE will add 1,000 to 7,000
25 compressor horsepower to the Port Westward site and/or up to 8,000 compressor
26 horsepower to the Kelso-Beaver Pipeline. All work on the existing pipeline will be
27 subject to FERC approval. The addition of compressor horsepower is intended to ensure
28 300 to 1000 psig gas pressure at the Port Westward Industrial Area with total capacity of
29 310 million standard cubic feet/day. [Amendments No. 1 & 7]
30

31 The interconnecting pipeline, about 18 inches in diameter, between the existing Kelso-
32 Beaver Pipeline and the energy facility will be about 1,000 feet long and will be installed
33 below grade with appropriate cathodic protection.
34

35 In addition, the facility will include as a related or supporting facility a secondary natural
36 gas pipeline that will connect the energy facility to an extension of the existing 20-inch
37 NW Natural Beaver Lateral. The connecting pipeline will be approximately 2000 feet
38 long and about 12 inches in diameter. The new pipeline will be installed below grade
39 with appropriate cathodic protection. The new pipeline will be owned and operated by
40 NW Natural. [Amendment No. 5]
41

42 **Water Supply Pipeline.** Water supply for the energy facility will be drawn from
43 Bradbury Slough at about River Mile 53.8 of the Columbia River from an existing PGE
44 intake facility for the PGE Beaver Generating Plant. The pump capacity of the existing
45 intake facility will be expanded. No major structural improvements or modifications to
46 the intake facility will be required. However, PGE will upgrade the fish screens to

1 comply with NMFS and ODFW criteria regardless of whether it builds the Port
2 Westward Generating Project. The Certificate Holder will install a water supply pipeline
3 about 20 inches in diameter and 6,000 feet long to convey water from the intake facility
4 to the energy facility. The water supply pipeline will traverse upland areas and will avoid
5 wetlands. [Amendment No. 1]
6

7 **Chlorination and Electrical Control Buildings.** Two small structures will be
8 constructed on upland south of the intake facility. One structure, with a footprint of about
9 600 square feet, will be for chlorination. The other structure, with a footprint of about 150
10 feet, will be for electrical control. Underground lines in a 25-foot wide corridor will
11 connect these structures to the intake structure. [Amendment No. 3]
12

13 **Wastewater Pipeline.** Process and cooling wastewater discharged from the energy
14 facility will be collected in a settling basin and returned to the Columbia River about one-
15 half mile northwest of the energy facility, pursuant to the Port of St. Helens' NPDES
16 permit. [Amendment No. 1]
17

18 **Utility Lines Between the Energy Facility Site and the PGE Beaver Generating**
19 **Plant.** The Certificate Holder will construct water, backup electricity and
20 communications lines between the existing PGE Beaver Generating Plant and the energy
21 facility. The Certificate Holder will install the lines below ground within existing
22 roadways. Potable water may be conveyed to the energy facility in a pipeline from the
23 potable water storage tank located in the vicinity of the PGE water intake facility that
24 currently serves the PGE Beaver Generating Plant. The potable water pipeline will be
25 about two inches in diameter. The Certificate Holder will install the potable water line
26 underground. The potable water line will join the energy facility's water supply pipeline
27 corridor at their intersection as shown on revised Figure B-2. [Amendment No. 1]
28

29 The Certificate Holder may also construct a demineralized water pipeline about six
30 inches in diameter from the PGE Beaver Generating Plant to the energy facility. If the
31 Certificate Holder constructs the demineralized water pipeline, it will not construct a
32 water treatment building as part of the energy facility. The Certificate Holder will install
33 a backup 13.8 kV electrical distribution line and a communications line in a conduit from
34 the PGE Beaver Generating Plant to the energy facility. The demineralized water line,
35 communications line, and backup electricity lines will be about 1,200 feet long, and the
36 portion of the potable water line between the potable water storage tank and the water
37 supply pipeline corridor will be about 1,700 feet long [Amendments No. 1 & 3]
38

39 **Temporary Construction Staging and Laydown Areas.** Temporary construction
40 staging and laydown areas totaling approximately 12.4 acres will be located around the
41 energy facility site. Another laydown area of about 6 acres will be located on upland
42 south of the existing PGE water intake structure. The areas will be used for storing
43 equipment and materials and as staging areas for constructing the power plant.
44 Construction laydown and staging areas are as depicted on Figure B-2 rev.1, submitted
45 with the Fourth Request for Amendment on January 18, 2006. [Amendment No. 4]
46

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

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

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

15 Alternative Two. The second alternative will entail routing the transmission line
16 from the energy facility to the PGE Trojan Substation near Goble, Oregon (a
17 distance of about 20 miles).
18

19 PWGP and the Summit Project present a unique situation regarding the transmission lines
20 for their facilities. The two proposed energy projects will be located close to each other
21 and will use the same existing transmission corridor and the same towers from Port
22 Westward to the vicinity of the BPA Allston Substation, Alternative One. The towers will
23 be double-circuited, with PWGP on one side and the Summit Project on the other.
24

25 The Portland General Electric Transmission Group will build the transmission lines for
26 either or both projects, depending on which energy facilities are eventually constructed.
27 The transmission line for each project is a related or supporting facility for that project,
28 and therefore, must be built to Council standards. However, because the Council is
29 reviewing the applications for both projects simultaneously, because they will use the
30 same towers, and because the same company will build and operate the transmission
31 lines, the Council has consolidated the reviews within the PWGP proceeding and is
32 placing conditions for the transmission lines in the site certificate for the Port Westward
33 Generating Project.
34

35 Some conditions account for the possibility that the Certificate Holder may construct the
36 Port Westward to BPA Allston Substation Transmission Line separately from
37 constructing the energy facility. Additionally, if the Certificate Holder for PWGP does
38 not construct the energy facility within the time specified in its Site Certificate or if it
39 terminates its Site Certificate, the Council intends that the Certificate Holder of the
40 Summit Project must amend its Site Certificate to include the 230 kV transmission line
41 from the Summit Project to the BPA Allston Substation.
42

43 **C.2. LOCATION OF THE FACILITY** 44

1 **C.2.a. The Energy Facility Site**

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

7
8 Bradbury Slough of the Columbia River lies to the northeast of the energy facility site.
9 Access to the energy facility site will be by traveling about 1.5 miles north on Kallunki
10 Road from its intersection with Alston-Mayger Road. The existing PGE Beaver
11 Generating Plant is located about one-half mile southwest of the energy facility site.
12

13 **C.2.b. Related or Supporting Facility Sites**

14 **Natural Gas Pipeline Corridors.** The primary natural gas pipeline will be about 18
15 inches in diameter and will interconnect with the existing Kelso-Beaver Pipeline about
16 1,000 feet west of the energy facility site. The natural gas pipeline corridor will lie within
17 the 852-acre parcel leased to PGE by the Port of St. Helens and situated within Section
18 15, Township 8 North, Range 4 West, Willamette Meridian.
19

20 The secondary natural gas pipeline will be about 12 inches in diameter, extending from
21 the energy facility to an extension of the existing NW Natural Beaver Lateral, near the
22 northeast corner of the Beaver Generating Plant. The related or supporting portion of the
23 new natural gas pipeline corridor will be approximately 2000 feet long and will lie within
24 the 852-acre parcel leased to PGE by the Port of St. Helens and situated within Sections
25 15 and 16, Township 8 North, Range 4 West, Willamette Meridian. [Amendment No. 5]
26

27 **Water Supply Pipeline Corridor.** The proposed water supply pipeline will supply raw
28 water to the energy facility from the existing PGE Beaver Generating Plant water intake
29 structure in Bradbury Slough of the Columbia River. The pipeline right-of-way will be
30 about 50 feet wide and 6,000 feet long, will cover an area of about 7 acres, and will lie
31 within the 852-acre parcel leased to PGE by the Port of St. Helens and situated within
32 Section 15, Township 8 North, Range 4 West, Willamette Meridian.
33

34 **Chlorination and Electrical Control Buildings.** Two small structures will be
35 constructed on upland south of the existing PGE Beaver Generating Plant water intake
36 structure in Bradbury Slough. The two structures, with a combined footprint of about 750
37 square feet, will lie within the 852-acre parcel leased to PGE by the Port of St. Helens
38 and situated within Section 15, Township 8 North, Range 4 West, Willamette Meridian.
39 [Amendment No. 3].
40

41 **Wastewater Pipeline Corridor.** Water discharged from the energy facility will be
42 returned to the Columbia River about one-half mile northwest of the energy facility. The
43 wastewater pipeline corridor will be about 100 feet wide and 2,400 feet long, will cover
44 an area of about 6 acres, and will lie primarily within the 852-acre parcel leased to PGE
45 by the Port of St. Helens and situated within Section 15 and 16, Township 8 North,
46 Range 4 West, Willamette Meridian. [Amendment No. 1]

1
2 **Utility Line Corridor Between the Energy Facility Site and the PGE Beaver**

3 **Generating Plant.** The Certificate Holder will construct a potable water pipeline, backup
4 electricity line, communications line and possibly a demineralized water pipeline from
5 the PGE Beaver Generating Plant or the potable water tank to the energy facility site. It
6 would install the lines a minimum depth of three feet below grade in existing roadways
7 entirely with the 825-acre parcel that the Port of St. Helens has leased to PGE. The parcel
8 is located within Section 15 and 22, Township 8 North, Range 4 West, Willamette
9 Meridian. [Amendment No. 1]

10
11 **Temporary Construction Staging and Laydown Areas.** Temporary construction
12 staging and laydown areas totaling approximately 12.4 acres will be located around the
13 energy facility site, within the 852-acre parcel leased to PGE by the Port of St. Helens
14 and situated within Sections 15 and 16, Township 8 North, Range 4 West, Willamette
15 Meridian. Another laydown area of about 6 acres will be located on upland south of the
16 existing PGE water intake structure within Section 15, Township 8 North, Range 4 West,
17 Willamette Meridian. The areas will be used for storing equipment and materials and as
18 staging areas for constructing the power plant. Construction laydown and staging areas
19 are as depicted on Figure B-2 rev.1 as submitted with the Request for Fourth Amendment
20 on January 18, 2006 [Amendment No. 4]

21
22 **Spoils Disposal Area.** Excess soils from construction at the energy facility site will be
23 spread across the spoils disposal site of about 11.6 acres, which will be located southeast
24 of the PGE Beaver Generating Plant, within the 852-acre parcel leased to PGE by the
25 Port of St. Helens and situated within Sections 15 and 22, Township 8 North, Range 4
26 West, Willamette Meridian. [Amendment No. 3]

27
28 **Transmission Line Corridor.** The transmission line will follow one of two alternative
29 routes:

30
31 Alternative One. Under this alternative, the energy facility will deliver electric
32 power to the BPA Allston Substation near Alston, Oregon, by means of a new
33 230-kV circuit on monopole steel structures, except where it will have to cross the
34 existing BPA lines. A separate 230 kV circuit will carry the output of the Summit
35 Project on the same structures, as noted above. The new transmission line will be
36 routed on an existing PGE right-of-way that is 250 feet wide, except at the BPA
37 Allston Substation where a new right-of-way may be required. The structures will
38 be placed on or near the centerline of the unused north half of the right-of-way.
39 The transmission line corridor will be about 125 feet wide and 10 miles long, will
40 occupy an area of about 300 acres, and will pass through Sections 15, 22, 23, 26,
41 35 and 36, Township 8 North, Range 4 West, and Sections 31, 5, 6, 4, 3 and 10,
42 Township 7 North, Range 3 West, Willamette Meridian.

43
44 Alternative Two. Under this alternative, the energy facility will deliver electric
45 power to Trojan near Goble, Oregon, by means of a new 230-kV circuit on
46 monopole steel structures. Between PWGP and the BPA Allston Substation, the

new transmission line will be routed on an existing PGE right-of-way 250 feet wide as described in Alternative One. The structures will be placed on or near the centerline of the unused north half of the right-of-way. Between the BPA Allston Substation and Trojan, the new transmission line will run parallel to an existing BPA transmission line. This section of the transmission line corridor will be about 125 feet wide and ten miles long, will occupy an area of about 300 acres, and will pass through Sections 10, 11, 15, 14, 23 and 24, Township 7 North, Range 3 West, and Sections 19, 30, 29, 28, 33 and 34, Township 7 North, Range 2 West, and Sections 3 and 2, Township 6 North, Range 2 West, Willamette Meridian.

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

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

D. COUNCIL SITING STANDARDS

D.1. [PLACEHOLDER]

[No Conditions]

D.2. ORGANIZATIONAL EXPERTISE

- (1) The Certificate Holder shall report to the Department of Energy ("Department") in a timely manner any change in the ownership of Portland General Electric Company ("PGE").
- (2) Before beginning construction of the energy facility, the Port Westward to Bonneville Power Administration ("BPA") Allston Substation Transmission Line, or other related or supporting facilities, the Certificate Holder shall identify to the Energy Facility Siting Council ("Council") whom it has chosen to act in the role of the engineering, procurement and construction ("EPC") contractor(s) for specific portions of the work.
- (3) If the Certificate Holder chooses a third-party contractor to operate the facility, the Certificate Holder shall submit to the Council the identity of the contractor so the Council may review the qualifications and capability of the contractor to meet the standards of OAR 345-0022-0010. If the Council finds that a new contractor meets these standards, the Council shall not require an amendment to the Site Certificate for the Certificate Holder to hire the contractor.
- (4) Any matter of non-compliance under this Site Certificate shall be the responsibility of the Certificate Holder. Any notice of violation issued under the

1 Site Certificate will be issued to the Certificate Holder. Any civil penalties levied
2 shall be levied on the Certificate Holder.

3
4 (5) The Certificate Holder shall contractually require the EPC contractor(s) and all
5 independent contractors and subcontractors involved in the construction and
6 operation of the facility to comply with all applicable laws and regulations and
7 with the terms and conditions of the Site Certificate. Such contractual provision
8 shall not operate to relieve the Certificate Holder of responsibility under the Site
9 Certificate.

10
11 (6) The Certificate Holder shall obtain necessary state and local permits or approvals
12 required for the construction, operation and retirement of the facility or ensure
13 that its contractors obtain the necessary state and local permits or approvals.

14
15 (7) [Deleted]. [Amendments No. 1 & 7]

16
17 (8) Before beginning construction of the energy facility, the Certificate Holder shall
18 deliver to the Department evidence that the Oregon Department of Environmental
19 Quality has issued to the Port of St. Helens a National Pollutant Discharge
20 Elimination System ("NPDES") permit that provides for the discharge of non-
21 sanitary wastewater from the Port Westward Industrial Site, including all non-
22 sanitary wastewater produced by the energy facility.

23
24 (9) Before beginning construction of the energy facility, the Certificate Holder shall
25 deliver to the Department a copy of the agreement between the Certificate Holder
26 and the Port of St. Helens that provides for discharge of non-sanitary wastewater
27 from the energy facility by means of the NPDES permit issued to the Port of St.
28 Helens.

29
30 **D.3. RETIREMENT AND FINANCIAL ASSURANCE**

31
32 (1) The Certificate Holder shall retire the facility if the Certificate Holder
33 permanently ceases construction or operation of the facility. The Certificate
34 Holder shall retire the facility according to a final retirement plan approved by the
35 Council, as described in OAR 345-027-0110, and prepared pursuant to Condition
36 D.3(2).

37
38 (2) Two years before closure of the energy facility, the Certificate Holder shall
39 submit to the Department a proposed final retirement plan for the facility and site,
40 pursuant to OAR 345-027-0110, including:

41
42 (a) A plan for retirement that provides for completion of retirement within
43 two years of permanent cessation of operation of the energy facility and
44 that protects the public health and safety and the environment;
45

- 1 (b) A description of actions the Certificate Holder proposes to take to restore
2 the site to a useful, non-hazardous condition; and,
3
- 4 (c) A detailed cost estimate, a comparison of that estimate with the dollar
5 amount secured by a bond or letter of credit and any amount contained in a
6 retirement fund, and a plan for assuring the availability of adequate funds
7 for completion of retirement.
8
- 9 (3) The Certificate Holder shall prevent the development of any conditions on the site
10 that would preclude restoration of the site to a useful, non-hazardous condition to
11 the extent that prevention of such site conditions is within the control of the
12 Certificate Holder.
13
- 14 (4) A retirement plan that the Certificate Holder submits may provide transmission
15 lines constructed and operated under this Site Certificate remain in operation to
16 serve other energy facilities. [Amendment No. 3]
17
- 18 (5) The Certificate Holder shall submit to the State of Oregon, through the Council, a
19 bond or letter of credit in the amount described below, naming the State of
20 Oregon, acting by and through the Council, as beneficiary or payee [Amendments
21 No. 3 & 7]
22
- 23 (a) Before beginning construction of Unit 1, the Certificate Holder submitted
24 a bond or letter of credit in the amount of \$3,698,000 (in 2004 dollars as
25 of the fourth quarter). Upon execution of the Seventh Amended Site
26 Certificate, the Certificate Holder shall adjust the amount of the bond or
27 letter of credit to \$5,201,000 (in 1st Quarter 2010 dollars). [Amendments
28 No. 1, 3 & 7]
29
- 30 (b) Before beginning construction of Unit 2, the Certificate Holder shall
31 submit a bond or letter of credit in an amount equal to the sum of (i)
32 \$5,201,000 (in 1st Quarter 2010 dollars) for Unit 1, plus (ii) an amount for
33 Unit 2 determined by application of the Department's Facility Retirement
34 Cost and Estimating Guide² subject to review and approval by the
35 Department. [Amendments No. 3 & 7]
36
- 37 (c) [Deleted]. [Amendments No. 1 & 3]
38
- 39 (d) The form of the bond or letter of credit and identity of the issuer shall be
40 subject to approval by the Council.
41

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

- 1 (e) The Certificate Holder shall maintain a bond or letter of credit in effect at
2 all times until the energy facility or the Port Westward to BPA Allston
3 Substation Transmission Line has been retired, as appropriate.
4
- 5 (f) The calculation of 1st quarter 2010 dollars (or 2002 dollars for purposes
6 of any five year supplemental payments for carbon dioxide offsets for
7 power augmentation on Unit 1) shall be made using the U.S. Gross
8 Domestic Product Implicit Price Deflator, Chain-Weight, as published in
9 the Oregon Department of Administrative Services' "Oregon Economic
10 and Revenue Forecast," or by any successor agency (the "Index")³. If at
11 any time the Index is no longer published, the Council shall select a
12 comparable calculation of 2002, 2004 and 2010 dollars. [Amendments No.
13 3, 6 and 7]
14
- 15 (g) The amount of the bond or letter of credit account shall increase annually
16 by the percentage increase in the Index.
17
- 18 (h) The Certificate Holder shall not revoke or reduce the bond or letter of
19 credit before retirement of the facility without approval by the Council.
20
- 21 (6) The Certificate Holder shall describe in the annual report submitted to the
22 Council, pursuant to OAR 345-026-0080, the status of the retirement fund or
23 other instrument to ensure it has adequate funds to restore the site.
24
- 25 (7) Before beginning construction of the energy facility, the Certificate Holder shall
26 prepare and submit to the Department a materials management and monitoring
27 plan that addresses the handling of hazardous substances, the measures it will
28 implement to prevent site contamination, and how it will document
29 implementation of the plan during construction. The materials management and
30 monitoring plan shall be subject to approval by the Department. For the purpose
31 of this condition and Conditions D.3(8), D.3(10), D.3(11), and D.3(12) below, the
32 terms "release" and "hazardous substances" shall have the meanings set forth at
33 ORS 465.200.
34
- 35 (8) Before beginning operation of the energy facility, the Certificate Holder shall
36 prepare and submit to the Department a materials management and monitoring
37 plan that addresses the handling of hazardous substances, the measures it will
38 implement to prevent site contamination, and how it will document
39 implementation of the plan during operation. The materials management and
40 monitoring plan shall be subject to approval by the Department.
41
- 42 (9) Not later than 10 years after the date of commercial operation of Phase 1 of the
43 energy facility, and each 10 years thereafter during the life of the energy facility,

³ DAS maintains the Index and places it on line at
<http://www.oregon.gov/DAS/OEA/docs/economic/econdata/other-quarterly.xls>

1 the Certificate Holder shall complete an independent Phase I Environmental Site
2 Assessment of the energy facility site. Within 30 days after its completion, the
3 Certificate Holder shall deliver the Phase I Environmental Site Assessment report
4 to the Department. [Amendment No. 1]
5

6 (10) In the event that any Phase I Environmental Site Assessment identifies improper
7 handling or storage of hazardous substances or improper record keeping
8 procedures, the Certificate Holder shall correct such deficiencies within six
9 months after completion of the corresponding Phase I Environmental Site
10 Assessment. It shall promptly report its corrective actions to the Department. The
11 Council shall determine whether the corrective actions are sufficient.
12

13 (11) The Certificate Holder shall report any release of hazardous substances, pursuant
14 to DEQ regulations, to the Department within one working day after the discovery
15 of such release. This obligation shall be in addition to any other reporting
16 requirements applicable to such a release.
17

18 (12) If the Certificate Holder has not remedied a release consistent with applicable
19 Oregon Department of Environmental Quality standards or if the Certificate
20 Holder fails to correct deficiencies identified in the course of a Phase I
21 Environmental Site Assessment within six months after the date of the release or
22 the date of completion of the Phase I Environmental Site Assessment, the
23 Certificate Holder shall submit within such six-month period to the Council for its
24 approval an independently prepared estimate of the additional cost of remediation
25 or correction.
26

27 (a) Upon approval of an estimate by the Council, the Certificate Holder shall
28 increase the amount of its bond or letter of credit by the amount of the
29 estimate.
30

31 (b) In no event, however, shall the Certificate Holder be relieved of its
32 obligation to exercise all due diligence in remedying a release of
33 hazardous substances or correcting deficiencies identified in the course of
34 a Phase I Environmental Site Assessment.
35

36 (13) All funds received by the Certificate Holder from the salvage of equipment and
37 buildings shall be committed to the restoration of the energy facility site to the
38 extent necessary to fund the approved site restoration and remediation.
39

40 (14) The Certificate Holder shall pay the actual cost to restore the site to a useful, non-
41 hazardous condition at the time of retirement, notwithstanding the Council's
42 approval in the Site Certificate of an estimated amount required to restore the site.
43

44 (15) If the Council finds that the Certificate Holder has permanently ceased
45 construction or operation of the facility without retiring the facility according to a
46 final retirement plan approved by the Council, as described in OAR 345-027-0110

1 and prepared pursuant to Condition D.3(2), the Council shall notify the Certificate
2 Holder and request that the Certificate Holder submit a proposed final retirement
3 plan to the Department within a reasonable time not to exceed 90 days.
4

5 (a) If the Certificate Holder does not submit a proposed final retirement plan
6 by the specified date or if the Council rejects the retirement plan that the
7 Certificate Holder submits, the Council may direct the Department to
8 prepare a proposed a final retirement plan for the Council's approval.
9

10 (b) Upon the Council's approval of the final retirement plan prepared pursuant
11 to subsection (a), the Council may draw on the bond or letter of credit
12 described in Condition D.3(5) and shall use the funds to restore the site to
13 a useful, non-hazardous condition according to the final retirement plan, in
14 addition to any penalties the Council may impose under OAR Chapter
15 345, Division 29.
16

17 (c) If the amount of the bond or letter of credit is insufficient to pay the actual
18 cost of retirement, the Certificate Holder shall pay any additional cost
19 necessary to restore the site to a useful, non-hazardous condition.
20

21 (d) After completion of site restoration, the Council shall issue an order to
22 terminate the Site Certificate if the Council finds that the facility has been
23 retired according to the approved final retirement plan.
24

25 **D.4. LAND USE**

26

27 (1) Before beginning construction of the energy facility, the Certificate Holder shall
28 submit a landscaping plan for the energy facility to Columbia County as part of its
29 building permit application for the energy facility. The landscaping plan shall be
30 subject to County approval, provided that the plan is consistent with this Site
31 Certificate and the Final Order. The Certificate Holder shall implement the
32 landscaping plan.
33

34 (2) Before beginning construction of the energy facility, the Certificate Holder shall
35 submit a site plan to Columbia County as part of its building permit application.
36

37 (3) Before beginning construction of the energy facility, the Certificate Holder shall
38 submit to Columbia County as part of its building permit application for the
39 energy facility a final parking lot plan that complies with Section 1400 of the
40 Columbia County Zoning Ordinance. The parking plan shall be consistent with
41 this Site Certificate and Attachment D of the Final Order. The Certificate Holder
42 shall implement the parking lot plan.
43

44 (4) Before beginning construction of the energy facility or the Port Westward to BPA
45 Allston Substation Transmission Line, as appropriate, the Certificate Holder shall

1 apply for and obtain all appropriate land use permits from Columbia County and
2 the City of Rainier.

- 3
4 (5) Before beginning construction of the energy facility, the Certificate Holder shall
5 enter into a written contract with Columbia County that recognizes the rights of
6 land owners who are adjacent to and nearby the corridor for the transmission line
7 from the BPA Allston Substation to the Trojan Nuclear Plant where it crosses PF-
8 76 and FA-19 zones to conduct forest operations consistent with the Forest
9 Practices Act and Rules for uses authorized in OAR 660-006-0025, subsections
10 (4)(e), (m), (s), (t), and (w).
11

12 **D.5. STRUCTURAL STANDARD**

- 13
14 (1) The Certificate Holder shall design, engineer and construct the facility to avoid
15 dangers to human safety presented by seismic hazards affecting the site that are
16 expected to result from all maximum probable seismic events. In no event shall
17 the recommended seismic design parameters be any less than those prescribed by
18 the Oregon Uniform Building Code. As used in this condition, "seismic hazard"
19 includes ground shaking, landslide, liquefaction, lateral spreading, tsunami
20 inundation, fault displacement, and subsidence.
21
22 (2) If the Certificate Holder does not have subsurface information for design of the
23 transmission lines that is acceptable to the Department and the Oregon
24 Department of Geology and Mineral Industries ("DOGAMI"), then the Certificate
25 Holder shall drill exploratory borings at critical locations during final design of
26 the proposed transmission lines.
27
28 (3) Before beginning construction of the facility, the Certificate Holder shall provide
29 the Department and DOGAMI with a report containing results of geotechnical
30 investigations and recommendations for the design of the energy facility,
31 transmission lines and other related or supporting facilities.
32
33 (a) The Certificate Holder shall prepare the report consistent with the study
34 designs detailed in the Section D.5 of the Final Order and Section H.3 the
35 Application for a Site Certificate ("ASC").
36
37 (b) If DOGAMI is not able to review the reports, the Department shall
38 arrange, in consultation with DOGAMI, for an independent review of the
39 report by a qualified registered geologist.
40
41 (c) If the Certificate Holder begins construction of the Port Westward to BPA
42 Allston Substation Transmission Line before beginning construction of
43 other parts of the facility, Condition D.5(3) shall apply only to the Port
44 Westward to BPA Allston Substation Transmission Line as long as it is
45 the only part of the facility under construction.
46

- (4) In addition to, or concurrent with Condition D.5(3), before beginning construction within the City of Rainier's Watershed zone, the Certificate Holder shall submit to the City of Rainier, the Department and DOGAMI a geotechnical report prepared by a registered engineer establishing that it can safely accomplish any construction in a known slide hazard area, flood hazard area, or drainage way, or on slopes exceeding 20 percent in that zone.
- (5) If the geotechnical investigation reveals evidence that is not described in the ASC, the Certificate Holder shall revise the facility design parameters to comply with appropriate Uniform Building Code requirements.
- (6) The Certificate Holder shall notify the Department, the State Building Codes Division and DOGAMI promptly if site investigations or trenching reveals that subsurface conditions differ significantly from those described in the ASC. After the Department receives the notice, the Council may require the Certificate Holder to consult with DOGAMI and the Building Codes Division and to propose mitigation actions.
- (7) The Certificate Holder shall notify the Department, the Building Codes Division and DOGAMI promptly if shear zones, artesian aquifers, deformations, or clastic dikes are found at or in the vicinity of the facility site.
- (8) The Certificate Holder shall design, engineer and construct the facility to avoid dangers to human safety presented by non-seismic or aseismic hazards affecting the site. As used in this condition, "non-seismic or aseismic hazards" includes settlement, landslides, groundwater, flooding, and erosion.
- (9) The secondary gas supply pipeline constructed and operated by NWN shall be designed to accommodate the potential for different settlement and seismic induced differential deformation, particularly where the pipeline connects to the existing supply line

D.6. SOIL PROTECTION

- (1) Upon completion of construction in an area, the Certificate Holder shall use native seed mixes to restore vegetation to the extent practicable and shall landscape portions of the site disturbed by construction in a manner compatible with the surroundings and proposed use. Conditions D.6(1) through D.6(6) shall apply to all soil disturbing activities, including maintenance, repair, reconstruction, and retirement of facilities. [Amendment No. 1]
- (2) The Certificate Holder shall employ the following measures to control soil erosion and sediment runoff by water and wind erosion:
 - (a) Avoid excavation and other soil disturbances beyond that necessary for construction of the facility or confine equipment use to specific areas.

- 1
2 (b) Remove vegetation only as necessary.
3
4 (c) Apply water or mulch, as necessary, for wind erosion control during
5 construction.
6
7 (d) Revegetate those construction areas that will no longer be used.
8
9 (e) Use temporary erosion and sediment control measures, such as sediment
10 fences, straw wattles, bio-filter bags, mulch, permanent and temporary
11 seeding, sediment traps and/or basins, rock check dams or gravel filter
12 berms, and gravel construction entrances, and maintain these features
13 throughout construction and restoration to reduce the potential for soil
14 erosion and sediment runoff.
15
16 (f) Protect soil stockpiles with mulch and plastic sheeting.
17
18 (3) If excessively wet conditions occur during construction, the Certificate Holder
19 shall limit construction activities during such periods to the degree practicable in
20 areas susceptible to soil compaction.
21
22 (4) After completing construction in an area, the Certificate Holder shall monitor the
23 construction area for a period of 12 months to evaluate whether construction-
24 related impacts to soils are being adequately addressed by the mitigation
25 procedures described in the Sediment Erosion and Control Plan. It shall submit its
26 quality assurance measures to the Department for approval before beginning
27 monitoring.
28
29 (5) After completing construction in an area, the Certificate Holder shall use the
30 results of the monitoring program in Condition D.6(4) to identify remaining soil
31 impacts associated with construction that require mitigation. As necessary, the
32 Certificate Holder shall implement follow-up restoration measures to address
33 those remaining impacts and shall report in a timely manner to the Department
34 what measures it has 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.
42
43 (8) The Certificate Holder shall design all inside spill containment areas to hold at
44 least 110 percent of the volume of liquids stored within them.
45

(9) The Certificate Holder shall design all spill containment areas located outdoors to hold at least 110 percent of the volume of liquids stored within them, together with the volume of precipitation that might accumulate during the 100-year return frequency storm.

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

D.7. PROTECTED AREAS

[No Conditions]

D.8. FISH AND WILDLIFE HABITAT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(6) Before beginning construction of the energy facility or beginning construction of the transmission lines, and in the appropriate season, the Certificate Holder shall conduct wildlife surveys within 0.25 miles of the site to locate great blue heron rookeries. Should it locate rookeries, the Certificate Holder shall consult with ODFW and the Department to determine the action necessary to avoid adverse impacts. If it cannot avoid impacts, the Certificate Holder shall suspend

1 construction in the affected areas during the critical nesting period of the species,
2 as determined by the Department in consultation with ODFW.

- 3
4 (7) The Certificate Holder will confirm breeding status and nest location of the Crims
5 Island bald eagles each year and consult with the Department and ODFW
6 concerning the need for monitoring and/or modifications to construction activities
7 if:

8
9 a) the project scope changes in a manner that may affect the bald eagles;
10 and/or,

11
12 b) the location(s) of bald eagle nests on Crims Island changes (e.g. moves
13 closer to the project construction site). [Amendment No. 7]

- 14
15 (8) As possible and practicable, the Certificate Holder shall conduct site preparation
16 for construction of the PW2 facility in a manner that minimizes potential for
17 impacting nesting native birds protected by the Migratory Bird Treaty Act
18 (MBTA), such as conducting initial site clearing outside of the breeding season
19 for most birds (generally March-July). Prior to commencement of construction
20 activity during the breeding season, a qualified biologist will conduct a walk-
21 down of the construction site to determine the presence of any active bird nests
22 and to rescue and relocate any nongame protected wildlife (OAR 635-045-0002)
23 that may be encountered according to the methods provided by ODFW. Surveys
24 will be conducted by a qualified wildlife biologist and will include complete
25 coverage of all areas to be disturbed using systematic transects spaced a
26 maximum of 5 meters apart. As applicable considering construction schedule,
27 PGE will also conduct a survey beginning in March prior to construction to detect
28 any streaked horned larks that could be using the very limited amount of potential
29 breeding habitat on site. PGE's survey protocol methods will be coordinated with
30 ODFW. Construction personnel will be trained regarding avian awareness issues
31 and reporting of bird nests and dead birds found at the construction site (also see
32 Condition D.8(1) for wildlife awareness requirements). The Certificate Holder
33 will consult with USFWS and ODFW regarding any active bird nests found
34 within the construction disturbance area. [Amendments No. 7 & 9]

- 35
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
40 purple martin nests. Should the Certificate Holder cause unavoidable impacts to
41 occur to any purple martin nest, it shall construct, install and maintain an artificial
42 nest site at a nearby location. It shall pick an appropriate location in consultation
43 with ODFW and the Department.
44

- 1 (10) When working around riparian areas or waterways, the Certificate Holder shall
2 use only herbicide labeled for use in those areas. The Certificate Holder shall
3 abide by all labeling instructions when using herbicides for vegetation
4 maintenance associated with the energy facility and transmission lines rights-of-
5 way.
6
- 7 (11) The Certificate Holder shall locate chemical storage, servicing of construction and
8 maintenance equipment and vehicles, and overnight storage of wheeled vehicles
9 at least 330 feet from any wetland or waterway.
10
- 11 (12) The Certificate Holder shall not construct any structure other than fences, signs
12 and the water supply pipeline within 50 feet of any Class I river, stream or the
13 emergent vegetation adjacent to such a river or stream or within 25 feet of any
14 other rivers, streams, and sloughs or the emergent vegetation adjacent to such a
15 river, stream, or slough or within the riparian corridors established under
16 Columbia County Zoning Ordinance Section 1172, as appropriate for the local
17 jurisdiction. [Amendment No. 2]
18
- 19 (13) To mitigate for impacts to 19 acres of non-native grassland, the Certificate Holder
20 shall protect 19 acres of on-site emergent wetland habitat identified in the ASC by
21 execution of a conservation easement for the life of the energy facility. Before
22 beginning construction of Phase 1 of the energy facility, the Certificate Holder
23 shall provide a copy of the conservation easement or similar conveyance to the
24 Department. [Amendment No. 1]
25
- 26 (14) The Certificate Holder shall restore temporary upland and wetland disturbance
27 areas by returning the areas to their original grade and seeding, with appropriate
28 seed mixes as recommended by ODFW and as described in Exhibit P, Section
29 P.8.1, of Certificate Holder's Request for Amendment No. 7,⁴ and by mulching
30 the areas with straw. [Amendment No. 7]
31
- 32 (15) The Certificate Holder shall not clear any more riparian vegetation than is
33 necessary for the permitted land use, including clearing required for safety
34 purposes, during construction or operation of the facility.
35
- 36 (16) During construction of the transmission line(s) and maintenance of the rights-of-
37 way, the Certificate Holder shall limit clearing of vegetation in riparian areas and
38 wetlands to that needed to prevent contact with the transmission line and to meet
39 clearance standards for safety and transmission line reliability, as provided in the
40 appropriate sections of the National Electrical Code. [Amendment No. 2]

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 (17) The Certificate Holder shall mitigate for impacts to riparian shrub and forest
3 habitat that result in canopy cover of less than 25 percent by revegetating these
4 areas with appropriate native woody species according to the Typical
5 Revegetation Plan (ASC, Exhibit Q, page Q-6.1).
6
7 (18) The Certificate Holder shall, as soon as practicable and appropriate after
8 completing construction in an area, implement the mitigation measures specified
9 in Conditions D.8(13), D.8(14) and D.8(17).
10
11 (19) The Certificate Holder shall monitor revegetated areas for a period of five years
12 and shall ensure that new vegetation has an 80 percent survival rate.
13
14 (20) The Certificate Holder shall monitor and control nuisance and invasive plant
15 species annually for a period of five years in areas where vegetation removal
16 and/or revegetation has occurred in (1) riparian areas and wetlands along the
17 transmission line rights-of-way, and (2) in areas temporarily disturbed by
18 construction of the raw water, gas, and process water discharge lines, in the
19 temporary construction staging and laydown area northwest of the energy facility
20 site, and in the spoils disposal site. [Amendment No. 3]
21
22 (21) The Certificate Holder shall submit an annual monitoring report to ODFW and the
23 Department during the five-year monitoring period specified in Condition
24 D.8(20).
25
26 (22) Within one year after completion of construction of the facility or the Port
27 Westward to BPA Allston Substation Transmission Line, if constructed
28 separately, the Certificate Holder shall provide a summary report to ODFW and
29 the Department that identifies the revegetation actions it took and the results of
30 revegetation monitoring conducted to that time. If the Certificate Holder
31 constructs the energy facility in phases, the Certificate Holder shall provide the
32 summary report to ODFW and the Department within one year after completion
33 of each phase. [Amendment No. 1]
34
35 (23) Within three months after completion of the final annual monitoring survey, the
36 Certificate Holder shall provide a report to ODFW and the Department that
37 presents the results of its revegetation monitoring.
38
39 (24) If revegetation is not successful at establishing appropriate plant cover and
40 controlling erosion, the Certificate Holder shall take remedial actions as the
41 Department directs.
42
43 (25) To mitigate for impacts to 8.5 acres of non-native grassland, the Certificate
44 Holder shall protect and enhance at least 8.5 acres of on-site emergent wetland
45 habitat identified in Certificate Holder's Request for Amendment No. 7 by
46 execution of a conservation easement for the life of the energy facility. Habitat

enhancement measures will include planting of trees and shrubs and controlling invasive plant species as described in revised Exhibit P, Section P.8.1 of Certificate Holder's Request for Amendment No. 7, November 19, 2009 revision (Attachment D of the Site Certificate). Before beginning construction of Unit 2 of the energy facility, the Certificate Holder shall provide a copy of the conservation easement or similar conveyance to the Department. [Amendment No. 7]

D.9. THREATENED AND ENDANGERED SPECIES

- (1) Before beginning construction of the transmission line between the BPA Allston Substation and the Trojan Nuclear Plant, the Certificate Holder shall direct qualified personnel to conduct species ground surveys along the transmission line corridor and within 150 feet on either side of the transmission line corridor at the appropriate time of year to determine the presence of listed plant species. If listed plant species are identified in the course of the species ground surveys, their presence shall be noted on maps, and PGE shall provide copies of the maps to the Department and the Department of Agriculture.
- (2) During construction of the transmission lines, the Certificate Holder shall manipulate construction equipment and site poles, towers and access roads to avoid impacts, except as provided in Condition D.9(4), to known populations of state- or federally-listed plant species.
- (3) The Certificate Holder shall ensure that all maintenance practices along the transmission line corridor minimize impacts to known populations of listed plant species.
- (4) In the event the Certificate Holder determines that it cannot avoid known populations of listed plant species, the Certificate Holder shall engage qualified personnel to determine whether the proposed action has the potential to reduce appreciably the likelihood of the survival or recovery of the listed species, notify the Department of its findings, and obtain approval from the Oregon Department of Agriculture before proceeding with construction activities that affect the listed plant species. (OAR 603-073-0090).
- (5) Before beginning construction of the transmission line, the Certificate Holder shall employ measures to protect raptors in the design and construction of transmission lines. It shall design all energized transmission conductors with either a minimum separation of nine feet or other measures to reduce the potential for electrocution of raptors or other birds.
- (6) The Certificate Holder shall not conduct construction activities at the transmission line terminus at the Trojan Nuclear Plant that generate extreme noise or high levels of visual disturbance during the peregrine falcon critical nesting period from January 1 to June 30. Such activities include pile driving, excavation, and

grading for ground stabilization purposes and site preparation. Construction activities involving lower levels of visible activity and less noise are allowed throughout the year. These include such activities as excavating and setting forms, pouring footings, erecting power line towers and bus duct, hanging conductor wires, installing control wires, and testing.

(a) Prior to beginning construction at the terminus site, the Certificate Holder shall provide the Department and ODFW with a final construction schedule that lists various construction activities, and time periods when specific work will be conducted. The schedule shall include information on the types of heavy construction equipment that will be used and the approximate number of workers and shall demonstrate that the construction activities are consistent with the limitations of this condition. The Certificate Holder shall provide scheduling updates as necessary to alert the Department and ODFW ahead of time of any proposed changes in the work schedule should the changes occur during the critical nesting period.

(b) The Certificate Holder shall monitor peregrine falcon activity at the transmission line terminus at the Trojan Nuclear Plant between January 1 to June 30 of construction years. Before beginning construction at the transmission line terminus at the Trojan Nuclear Plant, the Certificate Holder shall coordinate with ODFW and the Department and shall consequently prepare a peregrine falcon contingency plan. This contingency plan shall address actions that the Certificate Holder would undertake in the event that the Department and ODFW determine that monitoring shows the peregrine falcon pair's nesting activities are negatively affected by the transmission line construction activities.

(c) The Certificate Holder shall not proceed with construction activity at the transmission line terminus at the Trojan Nuclear Plant during the peregrine falcon critical nesting period from January 1 to June 30 to the extent that ODFW or the Department determines that the activity is not consistent with the limitations of this condition. [Amendment No. 3]

(7) The Certificate Holder shall plant suitable vegetative species for deer forage and cover within the wetland mitigation/enhancement area.

(8) The Certificate Holder shall coordinate with ODFW about whether to conduct site-specific fish sampling at waterways that do not have confirmation of species presence or absence along the transmission line corridor. If ODFW recommends that the Certificate Holder conduct site-specific sampling, the Certificate Holder shall do so and report the results to ODFW and the Department.

(9) The Certificate Holder shall not undertake construction at the energy facility site during the bald eagle nesting season unless it obtains a final Biological Opinion

1 and Incidental Take Statement issued by the U.S. Fish and Wildlife Service that
2 addresses potential impacts to the bald eagle nest site on the northwest tip
3 (downstream end) of Crims Island.
4

5 (a) The Certificate Holder shall construct and operate the energy facility
6 consistent with the final Biological Opinion and Incidental Take Statement
7 issued by the U.S. Fish and Wildlife Service.
8

9 (b) If the requirements of the Biological Opinion and Incidental Take
10 Statement conflict with any conditions imposed in this Site Certificate, the
11 Certificate Holder shall consult with the Department and ODFW to
12 resolve the conflicts prior to taking any action in reliance on the Biological
13 Opinion and Incidental Take Statement. [Amendment No. 3]
14

15 **D.10. SCENIC AND AESTHETIC VALUES**

16
17 (1) During construction of the facility, the Certificate Holder shall ensure that
18 contractors move equipment out of the construction area when it is no longer
19 expected to be used. To the extent practical, contractors shall lower equipment
20 with long arms, such as cranes, bucket trucks, backhoes, when not in use in order
21 to minimize visibility.
22

23 (2) During construction of the facility, the Certificate Holder shall control dust
24 through the application of water.
25

26 (3) During construction of the energy facility, the Certificate Holder shall use
27 directing and shielding devices on lights to minimize off-site glare. When there is
28 no nighttime construction activity, the Certificate Holder shall minimize night
29 lighting consistent with safety and security requirements.
30

31 (4) During operation of the energy facility, the Certificate Holder shall use directing
32 and shielding devices on lights to minimize off-site glare, consistent with safety
33 and security requirements.
34

35 (5) Before beginning construction of the energy facility, the Certificate Holder shall
36 submit to Columbia County and the Department an outdoor lighting plan that
37 shows how it will minimize glare from the energy facility site, consistent with
38 Conditions D.10(3) and D.10(4).
39

40 (6) The Certificate Holder shall paint structures with low-glare paint in colors
41 selected to complement the surrounding foreground and background colors.
42

43 (7) After completion of construction of related and supporting pipelines in an area,
44 the Certificate Holder shall re-vegetate any undeveloped areas disturbed by
45 construction activities using native species, including grasses, shrubs, and trees. If

necessary, the Certificate Holder shall water re-vegetated areas on a regular basis until the plant species have been successfully established.

D.11. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES

- (1) Before beginning construction of the Port Westward to BPA Allston Substation Transmission Line or the BPA Allston Substation to Trojan Transmission Line, the Certificate Holder shall complete an archaeological survey of the approved transmission line corridors in consultation with the Oregon Historic Preservation Office ("SHPO"), 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, the Chinook Tribe in Washington, and appropriate federal agencies. The Certificate Holder shall ensure that a qualified archaeologist evaluates all cultural resources identified during the cultural resources survey. The Certificate Holder shall report to SHPO and the Department about whether its archaeologist recommends that a discovery is significant or not significant. If SHPO determines that a discovery is significant, the Certificate Holder shall make recommendations to the Council for mitigation in consultation with SHPO, the Department, the tribes, and other appropriate parties. Mitigation measures shall include avoidance or data recovery. [Amendment No. 1]
- (2) During construction of the facility, the Certificate Holder shall ensure that a qualified person instructs construction personnel in the identification of cultural materials.
- (3) During construction of the facility, in the event any artifacts or other cultural materials are identified, the Certificate Holder shall cease all ground-disturbing activities until a qualified archaeologist can evaluate the significance of the find. The Certificate Holder shall report to SHPO and the Department about whether its archaeologist recommends the artifacts or cultural materials are significant or not significant. If SHPO determines that the materials are significant, the Certificate Holder shall make recommendations to the Council for mitigation in consultation with SHPO, the Department, the tribes, and other appropriate parties. Mitigation measures shall include avoidance or data recovery. The Certificate Holder shall not restart work in the affected area until it has demonstrated to the Department that it has complied with the archaeological permit requirements administered by SHPO. [Amendment No. 1]
- (4) The Certificate Holder shall allow monitoring by 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 Tribe in Washington of earth-moving activities within any areas with a potential for containing archaeological remains.

- 1 (5) Before beginning construction of the facility or of the Port Westward to BPA
2 Allston Substation Transmission Line separately, the Certificate Holder shall
3 notify the Confederated Tribes of the Warm Springs Indian Reservation of
4 Oregon, the Confederated Tribes of the Grand Ronde Community of Oregon, the
5 Confederated Tribes of the Siletz Indian Reservation of Oregon, and the Chinook
6 Tribe in Washington and provide their representatives the opportunity to be
7 available for periodic on-site monitoring during construction activities. If the
8 Certificate Holder constructs the energy facility in phases, the Certificate Holder
9 shall notify the Tribes prior to construction of each phase. [Amendment No. 1]
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
13 Natural shall immediately contact the State Historic Preservation Officer.
14 [Amendment 5]
15

16 **D.12. RECREATION**

17 [No Conditions]
18
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,
26 the Certificate Holder shall enter into an Amended Traffic Improvement
27 Agreement and pay a new Traffic Improvement Contribution to Columbia County
28 according to the Amended Traffic Improvement Agreement and consistent with a
29 Traffic Impact Analysis Study for the second power generation unit performed
30 according to parameters agreed to by Columbia County and the Certificate
31 Holder. [Amendment No. 8]
32
- 33 (3) The Certificate Holder shall not agree to amend the Agreement with Columbia
34 County to reduce, revoke or waive the requirement for payment of the appropriate
35 TIC without prior approval of the Council; however, such approval by the
36 Council shall not require an amendment to the Site Certificate.
37
- 38 (4) Before beginning construction of the energy facility, the Certificate Holder shall
39 coordinate with Columbia County the improvement and maintenance of signage
40 and striping at the mainline rail crossing on Kallunki Road, including the
41 installation of "DO NOT STOP ON TRACKS" signs.
42
- 43 (5) If construction of the energy facility occurs concurrently with construction of
44 other projects in the Port Westward Industrial Area, the Certificate Holder shall
45 coordinate with other users of the Port Westward Industrial Area to provide a

- 1 carpooling program that identifies and/or creates park-and-ride locations to
2 facilitate carpooling.
3
- 4 (6) If construction of the energy facility occurs concurrently with construction of
5 other projects in the Port Westward Industrial Area, the Certificate Holder shall
6 coordinate with Columbia County and other users of the Port Westward Industrial
7 Area on the implementation of a staggered shift schedule if Columbia County
8 determines that traffic conditions warrant it.
9
- 10 (7) During construction of the energy facility, the Certificate Holder shall use barge
11 and railroad deliveries of bulk materials to the extent practicable to minimize the
12 number of freight truck deliveries on local roads.
13
- 14 (8) The Certificate Holder shall construct a fire protection system within the
15 buildings and yard areas of the energy facility site that meets the requirements of
16 the Uniform Fire Code, as amended by Oregon and the National Fire Protection
17 Association standards, and all other applicable fire protection standards in effect
18 at the time of construction.
19
- 20 (9) The Certificate Holder shall provide a dedicated reserve capacity of 180,000
21 gallons 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
28 right 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
31 and limitations contained in Certificate **Error! Reference source not found.** and
32 any related decree.
- 33 b. The quantity of water diverted at the new point of diversion, shall not exceed the
34 quantity of water (3.0 cfs) lawfully available at the original point of diversion.
- 35 c. WRD may require the water user to install a headgate, a totalizing flow meter, or
36 other suitable measuring devices at the point of diversion. If WRD notifies the
37 water user to install a headgate, a totalizing flow meter, or other measuring
38 devices, the water user shall install such devices specified by WRD within the
39 period allowed in the notice. Once installed, the water user shall maintain the
40 meters or measuring devices in good working order and shall allow the
41 Watermaster access to the meters or measuring devices.

- 1 d. The water user shall maintain and operate a fish screening and/or by-pass device,
2 as appropriate, at the point of diversion consistent with the Oregon Department of
3 Fish and Wildlife's operational and maintenance standards.
- 4 e. The approved changes shall be completed and full beneficial use of the water
5 shall be made on or before October 1, 2015. A Claim of Beneficial Use prepared
6 by a Certified Water Rights Examiner shall be submitted by the Certificate Holder
7 to the Department within one year after the deadline for completion of the
8 changes and full beneficial use of the water.
- 9 f. Prior to issuance of the permanent transfer, the certificate holder shall provide to
10 ODOE and WRD a report of land ownership for the lands to which the water right
11 is appurtenant (the FROM lands). The report must be prepared by a title company.
12 The title company's report must either be: 1) prepared within three months of the
13 Energy Facility Siting Council's Final Order on PWGP Amendment 7, or 2)
14 reflect ownership information within three months of the recording of any water
15 right conveyance agreements for the property in the county deed records. The
16 ownership report shall include:
- 17 (A) Date reflected by the ownership information
18 (B) List of owners at that time
19 (C) Legal description of the property to which the water right involved in the
20 transfer is currently appurtenant, and
21 (D) A notarized statement of consent from any landowner listed in the ownership
22 report who is not already included in the transfer application, or other
23 information such as a water right conveyance agreement, if applicable.
24 [Amendments No. 7 & 9]
25
26
27

28 **D.14. WASTE MINIMIZATION, OAR 345-022-0120**
29

- 30 (1) During construction, operation and retirement of the energy facility, the
31 Certificate Holder shall separate recyclable materials from the solid waste stream
32 to the extent practicable, store those materials on site until sufficient quantities
33 exist to make recycling economic, and periodically deliver or sell those materials
34 to a recycling facility.
- 35 (2) During construction, operation and retirement of the energy facility, the
36 Certificate Holder shall segregate all used oil, mercury-containing lights, and
37 lead-acid and nickel-cadmium batteries, store such materials on site, and deliver
38 such materials to a recycling firm specializing in the proper disposal of such
39 materials.
- 40 (3) Upon completion of construction, the Certificate Holder shall dispose of all
41 temporary structures not required for facility operation and all timber, brush,
42 refuse, and flammable or combustible material resulting from clearing of land and
43 construction of the facility.
44
45

- 1
2 (4) During operation of the energy facility, the Certificate Holder shall convey all
3 storm water and water discharges other than sanitary sewage to pervious areas to
4 allow for percolation into the shallow groundwater.
5
6 (5) During operation of the energy facility, the Certificate Holder shall use internal
7 recycling of aqueous streams whereby water shall be recycled several times in the
8 cooling system before being discharged.
9

10 **D.15. CARBON DIOXIDE STANDARD**
11

- 12 (1) Before beginning construction of Phase 1 and Phase 2 of the energy facility,
13 respectively, the Certificate Holder shall submit to The Climate Trust a bond or
14 letter of credit in the amount of the monetary path payment requirement (in 2002
15 dollars for Phase 1 and in 1st quarter 2010 dollars for Phase 2) as determined by
16 the calculations set forth in Condition D.15(3) and based on the estimated heat
17 rates and capacities certified pursuant to Condition D.15(4) and as adjusted in
18 accordance with the terms of this Site Certificate pursuant to Condition
19 D.15(3)(c). For the purposes of this Site Certificate, the "monetary path payment
20 requirement" means the offset funds determined pursuant to OAR 345-024-0550
21 and -0560 and the selection and contracting funds that the Certificate Holder must
22 disburse to The Climate Trust, as the qualified organization, pursuant to OAR
23 345-024-0710 and this Site Certificate. The offset fund rate for the monetary path
24 payment requirement shall be \$0.85 per ton of carbon dioxide (in 2002 dollars)
25 for Phase 1 and \$1.27 per ton of carbon dioxide (in 1st quarter 2010 dollars) for
26 Phase 2. The calculation of 2002 and 1st quarter 2010 dollars shall be made using
27 the Index set forth in Condition D.3(5) and as required below in subsection (g).
28 [Amendments No. 1, 6 & 7]
29

- 30 (a) The form of the bond or letter of credit and identity of the issuer shall be
31 subject to approval by the Council.
32
33 (b) The form of the Memorandum of Understanding "MOU") between the
34 Certificate Holder and the Climate Trust establishing the disbursement
35 mechanism to transfer selection and contracting funds and offset funds to
36 The Climate Trust shall be substantially in the form of Attachment A to
37 this Site Certificate.
38
39 (c) Either the Certificate Holder or The Climate Trust may submit to the
40 Council for the Council's resolution any dispute between the Certificate
41 Holder and The Climate Trust that concerns the terms of the bond, letter of
42 credit, or MOU concerning the disbursement mechanism for the monetary
43 path payments, or any other issues related to the monetary path payment
44 requirement. The Council's decision shall be binding on all parties.
45

- 1 (d) The bond or letter of credit shall remain in effect until such time as the
2 Certificate Holder has disbursed the full amount of the monetary path
3 payment requirement to The Climate Trust. The Certificate Holder may
4 reduce the amount of the bond or letter of credit commensurate with
5 payments it makes to The Climate Trust. The bond or letter of credit shall
6 not be subject to revocation before disbursement of the full monetary path
7 payment requirement.
8
- 9 (e) In the event that the Council approves a new Certificate Holder for the
10 energy facility:
11
- 12 (A) The new Certificate Holder shall submit to the Council for the
13 Council's approval the form of a bond or letter of credit that
14 provides comparable security to the bond or letter of credit of the
15 current Certificate Holder. The Council's approval of a new bond
16 or letter of credit shall not require a site certificate amendment.
17
- 18 (B) The new Certificate Holder shall submit to the Council for the
19 Council's approval the form of an MOU between the new
20 Certificate Holder and The Climate Trust that is substantially in the
21 form of Attachment A to this Site Certificate. In the case of a
22 dispute between the new Certificate Holder and The Climate Trust
23 concerning the disbursement mechanism for monetary path
24 payments or any other issues related to the monetary path payment
25 requirement, either party may submit the dispute to the Council for
26 the Council's resolution as provided in Condition D.15(1)(c).
27 Council approval of a new MOU shall not require a site certificate
28 amendment.
29
- 30 (f) If calculations pursuant to Condition D.15(5) demonstrate that the
31 Certificate Holder must increase its monetary path payments, the
32 Certificate Holder shall increase the bond or letter of credit sufficiently to
33 meet the adjusted monetary path payment requirement within the time
34 required by Condition D.15(3)(c). Alternately, the Certificate Holder may
35 disburse any additional required funds directly to The Climate Trust
36 within the time required by Condition D.15(3)(c).
37
- 38 (g) The amount of the bond or letter of credit shall increase annually by the
39 percentage increase in the Index, and the disbursement of funds shall be
40 pro-rated within the year to the date of disbursement to The Climate Trust
41 from the calendar quarter of Council approval of the Site Certificate.
42
- 43 (2) The Certificate Holder shall disburse to The Climate Trust offset funds and
44 selection and contracting funds as requested by The Climate Trust. The Certificate
45 Holder shall make disbursements in response to requests from The Climate Trust
46 in accordance with subsections (a), (b), and (c).

- 1
2 (a) The Certificate Holder shall disburse all selection and contracting funds to
3 The Climate Trust before beginning construction.
4
5 (b) Upon notice pursuant to subsection (c), The Climate Trust may request
6 from the issuer of the bond or letter of credit the full amount of all offset
7 funds available or it may request partial payment of offset funds at its sole
8 discretion. Notwithstanding the specific amount of any contract to
9 implement an offset project, The Climate Trust may request up to the full
10 amount of offset funds the Certificate Holder is required to provide to
11 meet the monetary path payment requirement.
12
13 (c) The Climate Trust may request disbursement of offset funds by providing
14 notice to the issuer of the bond or letter of credit that The Climate Trust
15 has executed a letter of intent to acquire an offset project. The Certificate
16 Holder shall provide that the issuer of the bond or letter of credit disburse
17 offset funds to The Climate Trust within three business days of a request
18 by The Climate Trust for the offset funds in accordance with the terms of
19 the bond or letter of credit.
20
21 (3) The Certificate Holder shall submit all monetary path payment requirement
22 calculations to the Department for verification in a timely manner before
23 submitting a bond or letter of credit for Council approval and before entering into
24 an MOU with The Climate Trust. The Certificate Holder shall use the contracted
25 design parameters for capacities and heat rates that it reports pursuant to
26 Condition D.15(4) to calculate the estimated monetary path payment requirement,
27 along with the estimated annual hours of operation of power augmentation
28 technologies and of non-base load power plants for Unit 2. The Certificate Holder
29 shall use the Year One Capacities and Year One Heat Rates that it reports for the
30 facility pursuant to Condition D.15(5) to calculate whether it owes additional
31 monetary path payments. [Amendment No. 7]
32
33 (a) The net carbon dioxide emissions rate for the base load gas plant shall not
34 exceed 0.675 pounds of carbon dioxide per kilowatt-hour of net electric
35 power output, with carbon dioxide emissions and net electric power output
36 measured on a new and clean basis, as defined in OAR 345-001-0010.
37
38 (b) The net carbon dioxide emissions rate for Unit 2, and for incremental
39 emissions of Unit 1 operating with power augmentation technologies that
40 increase the capacity and heat rate of the facility above the capacity and
41 heat rate that it can achieve as a base load gas plant on a new and clean
42 basis ("power augmentation technologies") shall not exceed 0.675 pounds
43 of carbon dioxide per kilowatt-hour of net electric power output, with
44 carbon dioxide emissions and net electric power output measured on a
45 new and clean basis, as the Department may modify such basis pursuant to
46 Condition D.15(4)(d) and (g). [Amendment No. 7]

1
2 (c) When the Certificate Holder submits the Year One Test reports required in
3 Condition D.15(5), it shall increase its monetary path payments if the
4 calculation using reported data shows that the adjusted monetary path
5 payment requirement exceeds the monetary path payment requirement for
6 which the Certificate Holder had provided a bond or letter of credit before
7 beginning construction, pursuant to Condition D.15(1). The Certificate
8 Holder shall submit its calculations to the Department for verification.
9

10 (A) The Certificate Holder shall make the appropriate calculations and
11 fully disburse any increased funds directly to The Climate Trust
12 within 30 days of filing the Year One Test reports.
13

14 (B) In no case shall the Certificate Holder diminish the bond or letter
15 of credit it provided before beginning construction or receive a
16 refund from The Climate Trust based on the calculations made
17 using the Year One Capacities and the Year One Heat Rates.
18

19 (4) The Certificate Holder shall include an affidavit certifying the heat rates and
20 capacities reported in subsections (a), (b), (e) and (f).
21

22 (a) Before beginning construction of the energy facility, the Certificate Holder
23 shall notify the Council in writing of its final selection of a gas turbine
24 vendor and heat recovery steam generator vendor and shall submit written
25 design information to the Council sufficient to verify the base-load gas
26 plant's designed new and clean heat rate (higher heating value) and its net
27 power output at the average annual site condition.
28

29 (b) Before beginning construction of the energy facility, the Certificate Holder
30 shall submit written design information to the Council sufficient to verify
31 the facility's designed new and clean heat rate and its net power output at
32 the average annual site condition when operating with power
33 augmentation technologies.
34

35 (c) Before beginning construction of the energy facility, the Certificate Holder
36 shall specify the estimated annual average hours that it expects to operate
37 the power augmentation technologies.
38

39 (d) Upon a timely request by the Certificate Holder, the Department may
40 approve modified parameters for testing the power augmentation
41 technologies on a new and clean basis, pursuant to OAR 345-024-0590(1).
42 The Department's approval of modified testing parameters for power
43 augmentation technologies shall not require a site certificate amendment.
44

45 (e) Before beginning construction of Unit 2, the Certificate Holder shall
46 notify the Council in writing of its final selection of the quantities and

1 vendors for reciprocating engines and combustion turbine generators and
2 shall submit written design information to the Council sufficient to verify
3 the non-base load power plant's designed new and clean heat rate (higher
4 heating value) and its net power output at the average annual site
5 condition. [Amendment No. 7]
6

7 (f) Before beginning construction of Unit 2, the Certificate Holder shall
8 specify the estimated annual average hours that it expects to operate each
9 type of generating unit. The Certificate Holder may estimate annual
10 average hours of operation in a manner consistent with OAR 345-001-
11 0010(38). [Amendment No. 7]
12

13 (g) Upon a timely request by the Certificate Holder, the Department may
14 approve modified parameters for testing the non-base load power plants of
15 Unit 2 on a new and clean basis, pursuant to OAR 345-024-0590(1). The
16 Department's approval of modified testing parameters for non-base load
17 power plants shall not require a site certificate amendment. [Amendment
18 No. 7]
19

20 (5) Within the first 12 months of commercial operation of each phase of the energy
21 facility, the Certificate Holder shall conduct a 100-hour test at full power without
22 power augmentation technologies ("Year One Test-1") and a test at full power
23 with power augmentation technologies for Unit 1 ("Year One Test-2"). A 100-
24 hour test performed for purposes of the Certificate Holder's commercial
25 acceptance of the facility shall suffice to satisfy this condition in lieu of testing
26 after beginning commercial operation. [Amendments No. 6 & 7]
27

28 (a) Year One Test-1 shall determine the actual heat rate ("Year One Heat
29 Rate-1") and the net electric power output ("Year One Capacity-1") on a
30 new and clean basis, without degradation, with the results adjusted for the
31 average annual site condition for temperature, barometric pressure, and
32 relative humidity, and using a rate of 117 pounds of carbon dioxide per
33 million Btu of natural gas fuel pursuant to OAR 345-001-0010(35).
34

35 (b) Year One Test-2 shall determine the actual heat rate ("Year One Heat
36 Rate-2") and net electric power output ("Year One Capacity-2") for the
37 facility operating with power augmentation technologies, without
38 degradation, with the results adjusted for the average annual site condition
39 for temperature, barometric pressure and relative humidity, and using a
40 rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel
41 pursuant to OAR 345-001-0010(35). The full power test shall be 100
42 hours duration unless the Department has approved a different duration
43 pursuant to Condition (4)(d) or (4)(g). [Amendment No. 7]
44

- 1 (c) The Certificate Holder shall notify the Department at least 60 days before
2 conducting the tests required in subsections (a) and (b) unless a shorter
3 time is mutually agreed upon.
4
- 5 (d) Before conducting the tests required in subsections (a) and (b), the
6 Certificate Holder shall, in a timely manner, provide to the Department a
7 copy of the protocol for conducting the tests.
8
- 9 (e) Within two months after completing the Year One Tests, the Certificate
10 Holder shall provide to the Council a report of the results of the Year One
11 Tests.
12
- 13 (f) If the certificate holder elects to report all carbon dioxide emissions based
14 on direct measurements pursuant to OAR 345-024-0590(5)(b), then the
15 Year One Test for Unit 2 is not required. However, if the Year One test is
16 not performed, then the certificate holder must continue to report carbon
17 dioxide emissions using actual measured emissions as reported to the
18 Department of Environmental Quality or the U.S. Environmental
19 Protection Agency for all subsequent five year periods over the life of Unit
20 2, and may not change its election to report based on new and clean heat
21 rate in any subsequent five year period. [Amendment No. 7]
22
- 23 (g) If the Year One test is not performed for Unit 2 pursuant to subsection (f)
24 of this condition, then the certificate holder shall report its net kWh
25 generation and actual measured carbon dioxide emissions for the 12 month
26 period following start of commercial operation of Unit 2. The certificate
27 holder shall report the net kWh generation and actual carbon dioxide
28 emissions for this period to the Department within two months of the end
29 of the first 12 month period. The certificate holder shall use the net kWh
30 generation and measured carbon dioxide emissions to perform the
31 calculations to determine if supplemental monetary path payments are
32 needed as set forth in Condition D.15(6). The certificate holder shall
33 submit these calculations to the Department for verification as set forth in
34 Condition D.15(7). [Amendment No. 7]
35
- 36 (6) If calculations pursuant to Condition D.15(7) demonstrate that the Certificate
37 Holder must supplement its monetary path payments ("supplemental monetary
38 path payment requirement"), the Certificate Holder shall provide a bond or letter
39 of credit sufficient to meet the supplemental monetary path payment requirement
40 within the time required by Condition D.15(7)(b). The bond or letter of credit
41 shall not be subject to revocation before disbursement of the supplemental
42 monetary path payment requirement. Alternately, the Certificate Holder may
43 disburse in cash any such supplemental monetary path payments directly to The
44 Climate Trust within the time required by Condition D.15(7). [Amendment No. 7]
45

1 (7) The Certificate Holder shall submit all supplemental monetary path payment
2 requirement calculations and data to the Department for verification.
3 [Amendment No. 7]
4

5 (a) Each five years after beginning commercial operation of Unit 1 ("Unit 1
6 five-year reporting period"), the Certificate Holder shall report to the
7 Department the annual average hours Unit 1 operated with power
8 augmentation technologies during that Unit 1 five-year reporting period,
9 pursuant to OAR 345-024-0590(6). The Certificate Holder shall use the
10 Year One Capacity-2 and Year One Heat Rate-2 that it reports for Unit 1
11 pursuant to Condition D.15(5)(b) to calculate whether it owes
12 supplemental monetary path payments. The Certificate Holder shall
13 submit Unit 1 five-year reports to the Department within 30 days of the
14 anniversary date of beginning commercial operation of Unit 1.
15 [Amendment No. 7]
16

17 (b) If the Department determines that Unit 1 exceeds the projected net total
18 carbon dioxide emissions calculated pursuant to Conditions D.15(4) and
19 D.15(5), prorated for five years, during any Unit 1 five-year reporting
20 period described in subsection (a), the Certificate Holder shall offset
21 excess emissions for the specific reporting period according to subsection
22 (A) and shall offset the estimated future excess emissions according to
23 subsection (B), pursuant to OAR 345-024-0600(4). The Certificate Holder
24 shall offset excess emissions using the monetary path as described in OAR
25 345-024-0710, except that contracting and selecting funds shall equal
26 twenty (20) percent of the value of any offset funds up to the first
27 \$250,000 (in 2002 dollars) and 4.286 percent of the value of any offset
28 funds in excess of \$250,000 (in 2002 dollars). The Certificate Holder shall
29 disburse the funds to The Climate Trust within 30 days after notification
30 by the Department of the amount that the Certificate Holder owes.
31 [Amendment No. 7]
32

33 (A) In determining the excess carbon dioxide emissions that the
34 Certificate Holder must offset for a Unit 1 five-year period, the
35 Department shall apply OAR 345-024-0600(4)(a). The Certificate
36 Holder shall pay for the excess emissions at \$0.85 per ton of
37 carbon dioxide emissions (in 2002 dollars). The Department shall
38 notify the Certificate Holder and The Climate Trust of the amount
39 of payment required, using the monetary path, to offset excess
40 emissions. [Amendments No. 6 & 7]
41

42 (B) The Department shall calculate estimated future excess emissions
43 and notify the Certificate Holder of the amount of payment
44 required, using the monetary path, to offset them. To estimate
45 excess emissions for the remaining period of the deemed 30-year
46 life of the facility, the Department shall use the parameters

1 specified in OAR 345-024-0600(4)(b). The Certificate Holder shall
2 pay for the estimated excess emissions at \$ 0.85 per ton of carbon
3 dioxide (in 2002 dollars). The Department shall notify the
4 Certificate Holder of the amount of payment required, using the
5 monetary path, to offset future excess emissions. [Amendments
6 No. 6 & 7]
7

8 (c) At the time the Certificate Holder submits to the Department the
9 information required by Condition D.15(4)(e) and (f), the Certificate
10 Holder shall make the election required by OAR 345-024-0590(5)(b).
11 The election shall apply for each reporting period required pursuant to
12 subsections (d) and (e). [Amendment No. 7]
13

14 (d) Each five years after beginning commercial operation of Unit 2 ("Unit 2
15 five-year reporting period"), the Certificate Holder shall report to the
16 Department the information required by either subsection A or B. The
17 Certificate Holder shall submit Unit 2 five-year reports to the Department
18 within 30 days of the anniversary date of beginning commercial operation
19 of Unit 2. [Amendment No. 7]
20

21 (A) If the Certificate Holder has elected to calculate any excess
22 emissions using annual average hours of operation and new and
23 clean heat rates, the Certificate Holder shall report the annual
24 average hours of operation of each generating unit within Unit 2
25 during that Unit 2 five-year reporting period, pursuant to OAR
26 345-024-0590(6). The Certificate Holder shall use the Year One
27 Capacity-1 and Year One Heat Rate-1 that it reports for the
28 corresponding generating units of Unit 2 pursuant to Condition
29 D.15(5)(a) to calculate whether it owes supplemental monetary
30 path payments. [Amendment No. 7]
31

32 (B) If the Certificate Holder has elected to calculate any excess
33 emissions using actual or measured carbon dioxide emissions as
34 reported to either the Oregon Department of Environmental
35 Quality or the U.S. Environmental Protection Agency pursuant to a
36 mandatory carbon dioxide reporting requirement, the Certificate
37 Holder shall submit to the Department the carbon dioxide reporting
38 data and net kWh generation for that Unit 2 five-year reporting
39 period and shall use that data to determine whether it owes
40 supplemental monetary path payments. [Amendment No. 7]
41

42 (e) If the Department determines that Unit 2 exceeds the projected net total
43 carbon dioxide emissions calculated pursuant to Conditions D.15(4) and
44 D.15(5), prorated for five years, during any Unit 2 five-year reporting
45 period described in subsection (d), the Certificate Holder shall offset
46 excess emissions for the specific reporting period according to subsection

(A) and shall offset the estimated future excess emissions according to subsection (B), pursuant to OAR 345-024-0600(4). The Certificate Holder shall offset excess emissions using the monetary path as described in OAR 345-024-0710, except that contracting and selecting funds shall equal twenty (20) percent of the value of any offset funds up to the first \$250,000 (in 1st quarter 2010 dollars) and 4.286 percent of the value of any offset funds in excess of \$250,000 (in 1st quarter 2010 dollars). The Certificate Holder shall disburse the funds to The Climate Trust within 30 days after notification by the Department of the amount that the Certificate Holder owes. [Amendment No. 7]

(A) In determining the excess carbon dioxide emissions that the Certificate Holder must offset for a Unit 2 five-year period, the Department shall apply OAR 345-024-0600(4)(a), unless the Certificate Holder has elected under OAR 245-024-0590(5) to utilize actual or measured carbon dioxide emissions as reported to either the Oregon Department of Environmental Quality or the U.S. Environmental Protection Agency pursuant to a mandatory carbon dioxide reporting requirement. The Certificate Holder shall pay for the excess emissions at \$1.27 per ton of carbon dioxide emissions (in 1st Quarter 2010 dollars). The Department shall notify the Certificate Holder and The Climate Trust of the amount of payment required, using the monetary path, to offset excess emissions. [Amendment No. 7]

(B) The Department shall calculate estimated future excess emissions and notify the Certificate Holder of the amount of payment required, using the monetary path, to offset them. To estimate excess emissions for the remaining period of the deemed 30-year life of the facility, the Department shall use the parameters specified in OAR 345-024-0600(4)(b). The Certificate Holder shall pay for the estimated excess emissions at \$1.27 per ton of carbon dioxide (in 1st quarter 2010 dollars). The Department shall notify the Certificate Holder of the amount of payment required, using the monetary path, to offset future excess emissions. [Amendment No. 7]

(8) The combustion turbine for the base-load gas plant and power augmentation technologies and any combustion turbines constructed as part of Unit 2 shall be fueled solely with pipeline quality natural gas or with synthetic gas with a carbon content per million Btu no greater than pipeline-quality natural gas. Any reciprocating engines constructed as part of Unit 2 shall be fueled solely with pipeline quality natural gas or with synthetic gas with a carbon content per million Btu no greater than pipeline-quality natural gas, except that distillate fuel may be used for micro-pilot systems. [Amendment No. 7]

- 1 (9) With respect to incremental capacity and fuel consumption increases for which
2 the Certificate Holder has not previously complied with the carbon dioxide
3 standard, the Certificate Holder shall comply substantially with Conditions
4 D.15(1) through D.15(8) in lieu of the Council's requiring an amendment,
5 provided that:
6
7 (a) The Council determines, pursuant OAR 345-027-0050, that the Certificate
8 Holder does not otherwise require an amendment, and further provided
9 that:
10
11 (b) The Certificate Holder shall meet the appropriate carbon dioxide
12 emissions standard and monetary offset rate in effect at the time the
13 Council makes its determination pursuant to OAR 345-027-0050.
14
15 (10) Notwithstanding Conditions D.15(1) through d.15(9), if the Certificate Holder
16 begins construction of the Port Westward to BPA Allston Substation
17 Transmission Line, but no other part of the energy facility or other related or
18 supporting facilities, the Certificate Holder shall not be required to comply with
19 Conditions D.15(1) through D.15(9). The Certificate Holder shall comply with
20 Conditions D.15(1) through D.15(9) in connection with construction of any part
21 of the energy facility or related or supporting facilities other than the Port
22 Westward to BPA Allston Substation Transmission Line.
23
24 (11) If the Certificate Holder begins construction of Phase 1, but not Phase 2, the
25 Certificate Holder shall comply with Conditions D.15(1) through D.15(9) for
26 Phase 1. If the Certificate Holder later begins construction of Phase 2, the
27 Certificate Holder shall comply with Conditions D.15(1) through D.15(9) for
28 Phase 2. [Amendment No. 1]
29

30 **E. OTHER APPLICABLE REGULATORY REQUIREMENTS**
31

32 **E.1. REQUIREMENTS UNDER COUNCIL JURISDICTION**
33

34 **E.1.a. Noise**
35

- 36 (1) During construction of the facility, the Certificate Holder shall schedule most
37 heavy construction to occur during daylight hours. Construction work at night
38 shall be limited to work inside buildings and other structures when possible.
39
40 (2) During construction of the facility, the Certificate Holder shall require contractors
41 to equip all combustion engine-powered equipment with exhaust mufflers.
42
43 (3) During construction of the energy facility, transmission lines or other related or
44 supporting facilities, the Certificate Holder shall establish a complaint response
45 system at the construction manager's office to address noise complaints.
46

- 1 (4) Within six months after the start of commercial operation of the energy facility,
2 the Certificate Holder shall retain a qualified noise specialist to measure noise
3 levels associated with the energy facility operation-when environmental
4 conditions are expected to result in maximum sound propagation between the
5 source and the receivers and when the energy facility is operating in a typical
6 operations mode that produces maximum noise levels.
- 7 (a) The specialist shall measure noise levels at sites (1), (2), (5) and
8 (6), as described in Exhibit X of the ASC, to determine if actual
9 noise are within the levels specified in the applicable noise
10 regulations in OAR 345-035-0035(1)(b)(B)(i).
- 11 (b) The Certificate Holder shall report the results of the noise
12 evaluation to the Department.
- 13 (c) If actual noise do not comply with applicable DEQ regulations, the
14 Certificate Holder shall take those actions necessary to comply
15 with the regulations as soon as practicable.
- 16 (d) If initial measurements show that actual noise levels at site (5) by 7
17 dBA or more, the Certificate Holder shall measure the noise levels
18 as specified in this condition and shall repeat the process outlined
19 in subsections (a), (b), and (c) for site (5) within six months after
20 completion of the initial measurements.
- 21 (5) The Certificate Holder shall install silencers on short duration noise sources (e.g.
22 steam vents) from the heat recovery steam generator.
- 23
- 24 (6) The certificate holder shall confirm the PW1 noise level estimate at receiver 7
25 prior to the final design of PW2 and propose mitigation measures as necessary to
26 ensure that the total PWGP noise levels do not exceed the limits specified in
27 Table N-2 of the Final Order on Port Westward Amendment 7. [Amendment No.
28 7]
- 29 (7) Within six months after the start of commercial operation of PW2, the Certificate
30 Holder shall retain a qualified noise specialist to measure noise levels associated
31 with the PWGP energy facility operation (the operation of PW1 and PW2) during
32 late night hours when environmental conditions are expected to result in
33 maximum sound propagation between the source and each receiver and when the
34 entire energy facility is operating in a typical operations mode that produces
35 maximum noise levels.
- 36
- 37 (a) The specialist shall measure noise levels at sites (1), (2), (5),(6),
38 and (7), to determine if actual noise levels generated by the PWGP
39 are within the levels shown on Table N-2 of the Final Order on
40 Amendment 7. The noise levels at sites 1 and 2 shall be measured
41 when the wind is either calm or out of a northerly direction but
42 blowing no more than 10 mph. The noise levels at sites 5, 6 and 7
43 shall be measured when the wind is either calm or out of a
44 southerly direction but blowing no more than 10 mph.

- 1
2 (b) The Certificate Holder shall report the results of the noise
3 evaluation to the Department.
4
5 (c) If actual noise levels do not comply with applicable DEQ
6 regulations, the Certificate Holder shall take those actions
7 necessary to comply with the regulations as soon as practicable.
8
9 (d) If initial measurements at site (5) show that the hourly L₅₀ noise
10 level is 48 dBA or more with the Beaver Plant in operation or 47
11 dBA or more without the Beaver Plant in operation, the Certificate
12 Holder shall repeat the process outlined in subsections (a), (b), and
13 (c) at site (5) and (7) within six months after completion of the
14 initial measurements. [Amendment No. 7]
15
16 (8) To address the concern that noise from any other noise source not associated with
17 the PWGP or Beaver Plant have contributed to the results of the compliance noise
18 measurements, the Certificate Holder may measure noise levels to determine if
19 the operation of any other source has contributed to the compliance results. The
20 Certificate Holder shall report the results of the noise evaluation to the
21 Department indicating any adjustments to applicable noise limits consistent with
22 OAR 340-035-0035(1)(b)(B)(i). [Amendment No. 7]
23
24

25 **E.1.b. Wetlands and Removal/Fill Permit**
26

- 27 (1) Before beginning construction of Phase 1 of the energy facility or the Port
28 Westward to BPA Allston Substation Transmission Line, as appropriate, the
29 Certificate Holder shall obtain a U.S. Army Corps of Engineers and Oregon
30 Division of State Lands Joint Removal/Fill Permit substantially in the form of the
31 Removal/Fill Permit in Attachment C; provided, that mitigation required under
32 the Removal/Fill Permit shall allow for accommodation of Corps of Engineers
33 mitigation requirements, subject to the concurrence of the Department, in
34 consultation with the Division of State Lands and affected federal agencies.
35 [Amendment No. 1]
36
37 (2) The Certificate Holder shall comply with state laws and rules applicable to the
38 Removal/Fill Permit that are adopted in the future to the extent that such
39 compliance is required under the respective statutes and rules.
40
41 (3) The Certificate Holder shall clearly stake the wetland boundary adjacent to the
42 spoils disposal area and the wetland number 4 boundary adjacent to the
43 construction laydown/staging areas in the vicinity of the energy facility prior to
44 any ground disturbing activity in the spoils disposal area or in the construction
45 laydown/staging areas in the vicinity of the energy facility, and shall maintain the
46 staking until all ground-disturbing activities in the spoils disposal area and in the

1 construction laydown/staging areas in the vicinity of the energy facility have been
2 completed. The Certificate Holder shall instruct all contractors disposing of soil in
3 the spoils disposal area and using the construction laydown/staging areas in the
4 vicinity of the energy facility about the purpose of the staking and shall require
5 them to avoid any impact to the wetlands. [Amendment No. 3]
6

7 **E.1.c. Public Health and Safety**
8

- 9 (1) If local public safety authorities notify the Certificate Holder and the Department
10 that the operation of the energy facility is contributing significantly to ground
11 level fogging or icing along public roads and is likely to pose a significant threat
12 to public safety, the Certificate Holder shall cooperate with local public safety
13 authorities regarding the posting of warning signs on affected roads and the
14 implementation of other reasonable safety measures.
15
- 16 (2) The Certificate Holder shall design the transmission lines and backup electricity
17 lines so that alternating current electric fields shall not exceed 9 kV per meter at
18 one meter above the ground surface in areas accessible to the public. [Amendment
19 No. 1]
20
- 21 (3) The Certificate Holder shall design the transmission lines and backup electricity
22 lines so that induced currents and voltage resulting from the transmission lines are
23 as low as reasonably achievable. [Amendment No. 1]
24
- 25 (4) The Certificate Holder shall develop and implement a program that provides
26 reasonable assurance that all fences, gates, cattle guards, trailers, or other objects
27 or structures of a permanent nature that could become inadvertently charged with
28 electricity are grounded or bonded throughout the life of the transmission line.
29
- 30 (5) The Certificate Holder shall restore or mitigate the reception of radio and
31 television at residences and commercial establishments in the primary reception
32 area to the level present before operation of the transmission line at no cost to
33 residents or businesses experiencing interference resulting from the transmission
34 line.
35
- 36 (6) The Certificate Holder shall design, construct and operate the transmission lines
37 and backup electricity lines in accordance with the requirements of the National
38 Electrical Safety Code. [Amendment No. 1]
39
- 40 (7) The Certificate Holder shall take reasonable steps to reduce or manage exposure
41 to electromagnetic fields (EMF), consistent with Council findings presented in the
42 "Report of EMF Committee to the Energy Facility Siting Council," March 30,
43 1993, and subsequent findings. Effective on the date of this Site Certificate, the
44 Certificate Holder shall provide information to the public, upon request, about
45 EMF levels associated with the energy facility and related transmission lines and
46 backup electricity lines. [Amendment No. 1]

1
2 (8) At least 30 days before beginning preparation of detailed design and
3 specifications for the electrical transmission line(s) and backup electricity line(s)
4 or the natural gas pipelines, the Certificate Holder shall consult with the Oregon
5 Public Utility Commission staff to ensure that its designs and specifications are
6 consistent with applicable codes and standards. [Amendments No. 1 & 5]
7

8 (9) With respect to the related or supporting natural gas pipelines, the Certificate
9 Holder shall design, construct and operate the pipeline in accordance with the
10 requirements of the U.S. Department of Transportation as set forth in Title 49,
11 Code of Federal Regulations, Part 192. [Amendment No. 5]
12

13 **E.1.d. Water Pollution Control Facilities Permit**

14

15 (1) Before beginning commercial operation of Phase 1 of the energy facility, the
16 Certificate Holder shall demonstrate that the DEQ has issued to the Certificate
17 Holder a Water Pollution Control Facilities Permit, substantially in the form of
18 Attachment B.1, allowing for on-site sanitary waste disposal. [Amendment No. 1]
19

20 (2) The Certificate Holder shall comply with state laws and rules applicable to Water
21 Pollution Control Facilities Permits that are adopted in the future to the extent that
22 such compliance is required under the respective statutes and rules.
23
24
25

26 **F. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES**

27

28 **F.1. MANDATORY CONDITIONS IN SITE CERTIFICATES**

29

30 **Amendment of Site Certificate**

31 (1) The Council shall not change the conditions of the Site Certificate except in
32 accordance with the applicable provisions of OAR 345, Division 27, in effect on
33 the date of the Council action.
34

35 **Legal Description**

36 (2) Before beginning construction of Phase 1 of the energy facility, the Certificate
37 Holder shall submit to the Department a legal description of the site, except as
38 provided in OAR 345-027-0023(6). [Amendment No. 1]
39

40 (a) The legal description of the site for purposes of beginning construction of
41 Phase 1 may exclude the 180-foot wide strip (50 feet south and 130 feet
42 north of an existing road) immediately north of Phase 1.
43

44 (b) The Certificate Holder shall notify the Department in writing if it is
45 exercising the option to exclude the 180-foot wide strip from Phase 1.
46

- 1 (c) If the Certificate Holder excludes the strip from the legal description
2 during Phase 1, the Certificate Holder shall submit to the Office, before
3 beginning construction of Phase 2 of the energy facility, a legal
4 description indicating whether the energy facility site for Phase 2 includes
5 the 180-foot wide strip. [Amendment No. 2]
6

7 **General Requirements**

- 8 (3) The Certificate Holder shall design, construct, operate, and retire the facility:
9

- 10 (a) Substantially as described in the Site Certificate;
11
12 (b) In compliance with the requirements of ORS Chapter 469, applicable
13 Council rules, and applicable state and local laws, rules and ordinances in
14 effect at the time the Council issues the Site Certificate; and,
15
16 (c) In compliance with all applicable permit requirements of other state
17 agencies.
18
19

20 **Construction Rights on Site**

- 21 (4) Except as necessary for the initial survey or as otherwise allowed for transmission
22 lines or pipelines in this condition, the Certificate Holder shall not begin
23 construction, as defined in OAR 345-001-0010, or create a clearing on any part of
24 the site until the Certificate Holder has construction rights on all parts of the site.
25 For the purpose of this condition, "construction rights" means the legal right to
26 engage in construction activities. For transmission lines or pipelines, if the
27 Certificate Holder does not have construction rights on all parts of the site, the
28 Certificate Holder may nevertheless begin construction or create a clearing on a
29 part of the site if:
30

- 31 (a) The Certificate Holder has construction rights on that part of the site; and,
32
33 (b) The Certificate Holder would construct and operate part of the facility on
34 that part of the site even if a change in the planned route of the
35 transmission line or pipeline occurs during the Certificate Holder's
36 negotiations to acquire construction rights on another part of the site.
37

38 For purposes of this condition, the "site" for purposes of beginning construction
39 of Phase 1 may exclude the 180-foot wide strip (50feet south and 130 feet north
40 of an existing road) immediately north of Phase 1. [Amendment No. 2]
41

42 **Beginning and Completing Construction**

- 43 (5) The Certificate Holder shall begin construction of the energy facility by
44 November 8, 2006. Beginning construction of the Port Westward to BPA Allston
45 Substation Transmission Line shall not satisfy this requirement. [Amendment No.
46 2]

- 1
2 (a) The Certificate Holder shall report promptly to the Department the date
3 that it began construction of the facility, as defined in OAR 345-001-0010.
4 In reporting the beginning of construction, the Certificate Holder shall
5 briefly describe all work on the site performed before beginning
6 construction, including work performed before the Council issued the Site
7 Certificate and work performed to construct the Port Westward to BPA
8 Allston Substation Transmission Line, and shall state the cost of that
9 work, pursuant to OAR 345-026-0048. If the Certificate Holder constructs
10 the energy facility in phases, the Certificate Holder shall report the
11 beginning of construction of each phase. [Amendment No. 1]
12
13 (b) If the Certificate Holder begins construction of the Port Westward to BPA
14 Allston Substation Transmission Line, as defined in OAR 345-001-0010,
15 prior to beginning construction of the energy facility, it shall promptly
16 report to the Department the date it began construction of the transmission
17 line.
18
19 (6) The Certificate Holder shall complete construction of the facility by May 8, 2015.
20 The completion of construction date is the day by which (1) the facility is
21 substantially complete as defined by the Certificate Holder's construction contract
22 documents; (2) acceptance testing is satisfactorily completed; and, (3) the energy
23 facility is ready to commence continuous operation consistent with the Site
24 Certificate. Completion of construction of the Port Westward to BPA Allston
25 Substation Transmission Line separately shall not satisfy this requirement.
26 [Amendments No. 2, 6, 8 & 9]
27
28 (a) The Certificate Holder shall report promptly to the Department the date it
29 completed construction of the facility. If the Certificate Holder constructs
30 the energy facility in phases, the Certificate Holder shall report the date of
31 completion of each phase. [Amendment No. 1]
32
33 (b) If the Certificate Holder completes construction of the Port Westward to
34 BPA Allston Substation Transmission Line separately before completing
35 construction of the facility, it shall promptly report that date to the
36 Department.
37
38 (c) Separate completion of construction of Port Westward to BPA Allston
39 Substation Transmission Line shall be the date that PGE makes it
40 available to the Summit/Westward Project to transmit energy.
41
42

43 F.2 OTHER CONDITIONS BY RULE

44 Incident Reports

- 1 (1) With respect to the related or supporting natural gas pipelines, the Certificate
2 Holder shall submit to the Department copies of all incident reports required
3 under 49 CFR §192.709 that involve the pipeline.
4

5 **Rights-of-Way**

- 6 (2) Before beginning operation of the energy facility, the Certificate Holder shall
7 submit to the Department a legal description of the permanent right-of-way where
8 the Certificate Holder has built a pipeline or transmission line within an approved
9 corridor. The site of the pipeline or transmission line subject to the Site Certificate
10 is the area within the permanent right-of-way. However, if the Certificate Holder
11 completes construction of the Port Westward to BPA Allston Substation
12 Transmission Line before beginning construction of the energy facility, the
13 Certificate Holder shall submit to the Department a legal description of the
14 permanent right-of-way for that segment of that transmission line,
15 notwithstanding OAR 345-027-0023(6).
16

17 **Monitoring Programs**

- 18 (3) If the Certificate Holder becomes aware of a significant environmental change or
19 impact attributable to the facility, the Certificate Holder shall, as soon as possible,
20 submit a written report to the Department describing the impact on the facility and
21 its ability to comply with any affected Site Certificate conditions.
22

23 **Compliance Plans**

- 24 (4) Before beginning construction of the facility, the Certificate Holder shall
25 implement a plan that verifies compliance with all Site Certificate terms and
26 conditions and applicable statutes and rules. The Certificate Holder shall submit a
27 copy of the plan to the Department. The Certificate Holder shall document the
28 compliance plan and maintain it for inspection by the Department or the Council.
29 However, if the Certificate Holder begins construction of the Port Westward to
30 BPA Allston Substation Transmission Line before beginning construction of the
31 energy facility, the applicable compliance plan shall relate to that phase of
32 construction.
33

34 **Reporting**

- 35 (5) Within six months after beginning any construction, and every six months
36 thereafter during construction of the energy facility and related or supporting
37 facilities, the Certificate Holder shall submit a semi-annual construction progress
38 report to the Council. In each construction progress report, the Certificate Holder
39 shall describe any significant changes to major milestones for construction. When
40 the reporting date coincides, the Certificate Holder may include the construction
41 progress report within the annual report described in Condition F.2(6).
42
43 (6) The Certificate Holder shall, within 120 days after the end of each calendar year
44 after beginning construction, submit an annual report to the Council that addresses
45 the subjects listed in OAR 345-026-0080(2). The Council secretary and the
46 Certificate Holder may, by mutual agreement, change the reporting date.

- 1
2 (7) To the extent that information required by OAR 345-026-0080(2) is contained in
3 reports the Certificate Holder submits to other state, federal or local agencies, the
4 Certificate Holder may submit excerpts from such other reports. The Council
5 reserves the right to request full copies of such excerpted reports.
6

7 **Schedule Modification**

- 8 (8) The Certificate Holder shall promptly notify the Department of any changes in
9 major milestones for construction, decommissioning, operation, or retirement
10 schedules. Major milestones are those identified by the Certificate Holder in its
11 construction, retirement or decommissioning plans.
12

13 **Correspondence with Other State or Federal Agencies**

- 14 (9) The Certificate Holder and the Department shall exchange copies of all
15 correspondence or summaries of correspondence related to compliance with
16 statutes, rules and local ordinances on which the Council determined compliance,
17 except for material withheld from public disclosure under state or federal law or
18 under Council rules. The Certificate Holder may submit abstracts of reports in
19 place of full reports; however, the Certificate Holder shall provide full copies of
20 abstracted reports and any summarized correspondence at the request of the
21 Department.
22

23 **Notification of Incidents**

- 24 (10) The Certificate Holder shall notify the Department within 72 hours of any
25 occurrence involving the facility if:
26
27 (a) There is an attempt by anyone to interfere with its safe operation;
28
29 (b) A natural event such as an earthquake, flood, tsunami or tornado, or a
30 human-caused event such as a fire or explosion affects or threatens to
31 affect the public health and safety or the environment; or,
32
33 (c) There is any fatal injury at the facility.
34
35

36 **G. GENERAL CONDITIONS**

- 37
38 (1) The general arrangement of the Port Westward Generating Project shall be
39 substantially as shown in the ASC.
40
41 (2) The Certificate Holder shall ensure that related or supporting facilities are
42 constructed in the corridors described in this Order and as shown in ASC and in
43 the manner described in this Order and the ASC.
44
45 (3) During construction and operation of the energy facility, the Certificate Holder
46 shall house the combustion turbine in an enclosure that provides thermal

1 insulation, acoustical attenuation, and fire extinguishing media containment and
2 that would allow access for routine inspection and maintenance.
3

4 **Successors and Assigns**

- 5 (4) Before any transfer of ownership of the facility or ownership of the Certificate
6 Holder, the Certificate Holder shall inform the Department of the proposed new
7 owners. The requirements OAR 345-027-0100 shall apply to any transfer of
8 ownership that requires a transfer of the Site Certificate.
9

10 **Severability and Construction**

- 11 (5) If any provision of this Site Certificate is declared by a court to be illegal or in
12 conflict with any law, the validity of the remaining terms and conditions shall not
13 be affected, and the rights and obligations of the parties shall be construed and
14 enforced as if the Site Certificate did not contain the particular provision held to
15 be invalid. In the event of a conflict between the conditions contained in the Site
16 Certificate and the Council's Order, the conditions contained in this Site
17 Certificate shall control.
18
19

20 **Governing Law and Forum**

- 21 (6) This Site Certificate shall be governed by the laws of the State of Oregon.
22
23 (7) Any litigation or arbitration arising out of this agreement shall be conducted in an
24 appropriate forum in Oregon.
25

26 IN WITNESS WHEREOF, this Site Certificate has been executed by the State of
27 Oregon, acting by and through its Energy Facility Siting Council, and Portland General
28 Electric Company.
29

30 ENERGY FACILITY SITING COUNCIL
31
32
33

34 By: W. Bryan Wolfe 3/15/13
35 W. Bryan Wolfe, Chair Date
36
37

38 PORTLAND GENERAL ELECTRIC COMPANY
39
40
41

42 By: Stephen M. Manning 03/21/13
43 Date
44

45 ATTACHMENT A MEMORANDUM OF UNDERSTANDING: MONETARY PATH
46 PAYMENT REQUIREMENT

- 1 ATTACHMENT B WATER POLLUTION CONTROL FACILITIES PERMIT (B.1)
- 2 AND ANALYSIS (B.2)
- 3 ATTACHMENT C REMOVAL/FILL PERMIT
- 4
- 5 ATTACHMENT D PGE REQUEST FOR AMENDMENT 7, REVISED EXHIBIT
- 6 P.8.1 (AS TRANSMITTED IN NOVEMBER 19, 2009 LETTER RICK TETZLOFF TO ADAM BLESS
- 7 "PORT WESTWARD GENERATING PROJECT – REVISIONS TO REQUEST TO AMEND SITE
- 8 CERTIFICATE (AMENDMENT 7) TO ADDRESS ODFW COMMENTS")
- 9
- 10 [ADD WATER RIGHT TRANSFER EXTENSION?]