

**SITE CERTIFICATE**

**FOR THE**

**PORT WESTWARD GENERATING PROJECT**

ISSUED BY

OREGON ENERGY FACILITY SITING COUNCIL  
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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 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, and which by this reference is incorporated herein.

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 Final Order, and the Application for a Site Certificate for the Port Westward Generating Project, which the Office of Energy (“Office”) filed on April 11, 2002.

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

**B. SITE CERTIFICATION**

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

- 1 4. Both the State and the Certificate Holder shall abide by local ordinances and state law  
2 and the rules of the Council in effect on the date this Site Certificate is executed. In  
3 addition, upon a clear showing of a significant threat to the public health, safety or the  
4 environment that requires application of later-adopted laws or rules, the Council may  
5 require compliance with such later-adopted laws or rules. ORS 469.401(2).  
6
- 7 5. For a permit, license or other approval addressed in and governed by this Site Certificate,  
8 the Certificate Holder shall comply with applicable state and federal laws adopted in the  
9 future to the extent that such compliance is required under the respective state agency  
10 statutes and rules. ORS 469.401(2).  
11
- 12 6. Subject to the conditions herein, this Site Certificate binds the State and all counties,  
13 cities and political subdivisions in this state as to the approval of the site and the  
14 construction, operation and retirement of the Project as to matters that are addressed in  
15 and governed by this Site Certificate. ORS 469.401(3).  
16
- 17 7. Each affected state agency, county, city and political subdivision in Oregon with  
18 authority to issue a permit, license or other approval addressed in or governed by this Site  
19 Certificate shall, upon submission of the proper application and payment of the proper  
20 fees, but without hearings or other proceedings, issue such permit, license or other  
21 approval subject only to conditions set forth in this Site Certificate. ORS 469.401(3).  
22
- 23 8. After issuance of this Site Certificate, each state agency or local government agency that  
24 issues a permit, license or other approval for the Project shall continue to exercise  
25 enforcement authority over such permit, license or other approval. ORS 469.401(3).  
26
- 27 9. After issuance of this Site Certificate, the Council shall have continuing authority over  
28 the site and may inspect, or direct the Office to inspect, or request another state agency or  
29 local government to inspect, the site at any time in order to assure that the Project is being  
30 operated consistently with the terms and conditions of this Site Certificate. ORS  
31 469.430.  
32

### 33 **C. SITE DESCRIPTIONS**

#### 34 **C.1. FACILITY**

##### 35 **C.1.a. Major Structures and Equipment**

36 **Major Structures and Equipment.** The net electric power output of the energy facility will be  
37 about 560 MW. It will use power augmentation, i.e., duct burning, that will allow it to achieve a  
38 net electric power output of about 650 MW for a limited number of hours annually on average.  
39  
40

41 The energy facility will consist of two essentially identical combustion turbine generators  
42 (General Electric Frame 7FB's or comparable combustion turbines), two heat recovery steam  
43 generators ("HRSG"), and two steam generators. It will burn natural gas in the combustion  
44 turbines and duct burners. Expanding gases from combustion will turn rotors within the turbines  
45 that are connected to electric generators. The hot gases exhausted from the combustion turbines

1 and duct burners will be used to raise steam in the HRSGs. Steam from the HRSGs will be  
2 expanded through the steam turbines. Each steam turbine will drive its own electric generator.

3  
4 The combustion turbines will be housed in a turbine building that provides thermal insulation,  
5 acoustical attenuation and fire extinguishing media containment. The turbine building,  
6 occupying a footprint measuring about 230 feet by 560 feet and standing about 90 feet high, will  
7 also house the steam turbine generators, condensers, balance of plant equipment, control room,  
8 and administrative offices. The enclosure will allow access for routine inspection and  
9 maintenance.

10  
11 Each of the two HRSGs will occupy a footprint measuring about 50 feet by 150 feet and will  
12 stand about 110 feet high. A stack will be provided for each combustion turbine's HRSG. The  
13 two stacks will be about 15 to 25 feet in diameter and 200 feet high.

14  
15 Four transformers will step-up the combustion turbine and steam turbine generator voltages to  
16 the substation voltage of 230 kilovolts ("kV"). Two auxiliary transformers will supply power for  
17 plant auxiliary loads.

18  
19 Most of the structures comprising the energy facility, including the combustion and steam  
20 turbines and generators, the main step-up transformers, the HRSG, and the control rooms, will be  
21 contained within an area measuring about 400 feet by 560 feet.

22  
23 Two mechanical-draft cooling towers will be used to remove the waste heat from each main  
24 condenser and the plant auxiliary heat exchangers. The cooling towers and circulating water  
25 pumps will cover an area of about 75 feet by 650 feet and will stand about 50 feet high.

26  
27 A switchyard will interconnect the plant's output to the 230-kV transmission network. The  
28 switchyard footprint will measure about 300 feet by 500 feet.

29  
30 Additional facilities will include: a plant services/warehouse building; two boiler feed pump  
31 buildings; a fire water pump building; a water treatment building; a clarifier; a settling basin; a  
32 condensate tank, a fire water/service water storage tank and a demineralized water storage tank  
33 (each with 440,000-gallon capacity); a natural gas metering station; and, an aqueous ammonia  
34 storage tank (with 100,000-gallon capacity and equipped with containment).

35  
36 Natural gas will not be stored at the energy facility site. Diesel fuel for the fire pumps will be  
37 stored in an aboveground tank. Water treatment chemicals will be stored in permanent  
38 aboveground storage tanks or portable plastic tanks (totes). To prevent storm water runoff from  
39 chemical storage, all fuel and chemical storage will be inside buildings or under cover in paved  
40 areas with a curb. All individual spill containment areas will be designed to hold at least  
41 110 percent of the volume of liquids stored within them.

42  
43 A complete fire protection system will be installed within the buildings and yard areas at the  
44 energy facility site. The system will be designed to meet the requirements of the Uniform Fire  
45 Code, as amended by Oregon and the National Fire Protection Association, and all other

1 applicable fire protection standards. The fire protection system will include a fire water system,  
2 a dry chemical extinguishing system, a carbon dioxide (“CO<sub>2</sub>”) extinguishing system, and  
3 portable fire extinguishers. The road system within the energy facility site will be designed for  
4 access by large trucks needed for equipment and material deliveries. The minimum turning  
5 inside radius for roads will be 40 feet.

6  
7 The fire water system will include a fire water supply loop, fire hydrants, sprinkler systems, and  
8 hoses placed at appropriate locations. Reserved capacity in the 180,000-gallon fire water/service  
9 water storage tank will serve as the firewater source.

10  
11 The combustion turbine enclosures will be protected by foam or CO<sub>2</sub> systems. If the systems  
12 were to activate, an alarm will sound and/or a visual indicator will light up on the gas turbine  
13 control panel.

14  
15 Portable fire extinguishers will be placed at key locations within the energy facility site. The  
16 type and number of portable fire extinguishers will conform to applicable code requirements.

17  
18 **Output.** The energy facility will have a net electric power output of about 560 MW at an  
19 average annual site condition of 51 degrees Fahrenheit, 14.691 pounds per square inch  
20 barometric pressure, and 78 percent relative humidity. The new and clean heat rate will be about  
21 6,790 Btu (higher heating value).

22  
23 With power augmentation technologies (duct burning), the energy facility will have a net electric  
24 power output of about 650 MW and a new and clean heat rate of about 7,100 Btu (higher heating  
25 value). The Certificate Holder proposes to operate the energy facility with power augmentation  
26 technologies for 3,000 hours annually on average.

27  
28 **Fuel Use.** The energy facility will use natural gas as the only fuel to power the turbines and the  
29 power augmentation technologies. It will use 4,600 MM Btu per hour of natural gas at full load  
30 with the duct burners in operation at the average annual site condition.

31  
32 **Water Use.** The energy facility will obtain water to generate steam and to cool the steam  
33 process from an existing PGE intake structure on the Bradbury Slough of the Columbia River.  
34 the Certificate Holder will enter into a contract with the Port of St. Helens, which has an existing  
35 water permit, to obtain water sufficient for operation of the energy facility.

36  
37 Average water demand at the energy facility will be about 2,800 gallons per minute (“gpm”), or  
38 4.0 million gallons per day (“gpd”). Peak water demand will be about 3,700 gpm, 5.4 million  
39 gpd, or 8.3 cubic feet per second (“cfs”).

40  
41 The energy facility will require no new state-administered water right, water rights transfer, or  
42 surface water right permit for water supply. The Port of St. Helens has an existing municipal  
43 water use permit for 30 cfs.

1 The water right has a permitted point of diversion, where existing withdrawals occur and the  
2 energy facility withdrawals will occur. PGE owns and operates the existing point of diversion.  
3 To serve the energy facility, PGE will place additional pumps within the existing intake facility.  
4 PGE will employ fish screens compliant with National Marine Fisheries Service (“NMFS”)  
5 screening criteria and Oregon Department of Fish and Wildlife (“ODFW”) criteria.  
6

7 **Wastewater.** Process blowdown is washdown water, filter backwash or other non-sanitary  
8 liquid waste produced within the energy facility. The average volume of process blowdown will  
9 be about 190 gpm. Cooling system blowdown is water withdrawn from the cooling system to  
10 control the buildup of dissolved salts. The average volume of cooling system blowdown will be  
11 about 460 gpm, but it could vary depending on the quality of the river water supply. The energy  
12 facility will discharge its process and cooling system blowdown to the Columbia River under a  
13 National Pollution Discharge Elimination System (“NPDES”) permit that the Port of St. Helens  
14 has requested from DEQ.  
15

16 The Certificate Holder will discharge sanitary sewage to an engineered septic tank and drain  
17 field at a rate of about 500 gallons per day, as permitted by a Water Pollution Control Facilities  
18 permit. The Certificate Holder will route storm water from roofs and paved areas to pervious  
19 areas to percolate into the shallow groundwater.  
20

#### 21 **C.1.b. Related or Supporting Facilities**

22 The energy facility will include the following related or supporting facilities:  
23

24 **Natural Gas Pipeline.** Natural gas will fuel the combustion turbine generators and duct burners.  
25 The energy facility will be served by the Kelso-Beaver Pipeline, an existing FERC-regulated  
26 interstate pipeline with a current capacity of 193,000 decatherms per day. PGE owns the  
27 pipeline jointly with two other parties. To create the additional capacity that will be required to  
28 serve the energy facility, PGE will add 4,000 to 15,000 compressor horsepower to the Kelso-  
29 Beaver Pipeline. All work on the existing pipeline will be subject to FERC approval. The  
30 addition of compressor horsepower is intended to ensure 415 to 520 psig gas pressure at the Port  
31 Westward Industrial Area with total capacity of 310 million standard cubic feet/day.  
32

33 The interconnecting pipeline, about 18 inches in diameter, between the existing Kelso-Beaver  
34 Pipeline and the energy facility will be about 1,000 feet long and will be installed below grade  
35 with appropriate cathodic protection.  
36

37 **Water Supply Pipeline.** Water supply for the energy facility will be drawn from Bradbury  
38 Slough at about River Mile 53.8 of the Columbia River from an existing PGE intake facility.  
39 The pump capacity of the existing intake facility will be expanded. No major structural  
40 improvements or modifications to the intake facility will be required. However, PGE will  
41 upgrade the fish screens to comply with NMFS and ODFW criteria regardless of whether it  
42 builds the Port Westward Generating Project. The Certificate Holder will install a water supply  
43 pipeline about 20 inches in diameter and 6,000 feet long to convey water from the intake facility  
44 to the energy facility. The water supply pipeline will traverse upland areas and will avoid  
45 wetlands.

1  
2 **Reclaimed Wastewater Pipeline.** Process and cooling wastewater discharged from the energy  
3 facility will be collected in a settling basin and returned to the Columbia River about one-half  
4 mile northwest of the energy facility, pursuant to the Port of St. Helens' NPDES permit.  
5

6 **Electric Transmission Line.** The energy facility will deliver electric power to the regional grid  
7 by means of a new transmission line consisting of one 230 kV circuit on monopole towers (up to  
8 120 feet high) routed along existing power line easements. There are two transmission line  
9 alternatives routes under consideration, with two other short alternative segments in the vicinity  
10 of the BPA Allston Substation:  
11

12 Alternative One. The first alternative will entail routing the transmission line from the  
13 energy facility to the Bonneville Power Administration ("BPA") Allston Substation near  
14 Alston, Oregon (a distance of about 10 miles).  
15

16 Alternative Two. The second alternative will entail routing the transmission line from the  
17 energy facility to the PGE Trojan Substation near Goble, Oregon (a distance of about  
18 20 miles).  
19

20 PWGP and the Summit Project present a unique situation regarding the transmission lines for  
21 their facilities. The two proposed energy projects will be located close to each other and will use  
22 the same existing transmission corridor and the same towers from Port Westward to the vicinity  
23 of the BPA Allston Substation, Alternative One. The towers will be double-circuited, with  
24 PWGP on one side and the Summit Project on the other.  
25

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

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

## 42 **C.2. LOCATION OF THE FACILITY** 43

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 Clatskanie  
3 in Columbia County, Oregon. The energy facility site will be located on an approximately  
4 852-acre parcel leased to PGE by the Port of St. Helens in Section 15, Township 8 North, Range  
5 4 West, Willamette Meridian. The energy facility site will be fenced and will comprise about  
6 19 acres of the larger parcel.  
7

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

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

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

20 **Water Supply Pipeline Corridor.** The proposed water supply pipeline will supply raw water to  
21 the energy facility from the existing PGE Beaver Generating Plant water intake structure in  
22 Bradbury Slough of the Columbia River. The pipeline right-of-way will be about 50 feet wide  
23 and 6,000 feet long, will cover an area of about 7 acres, and will lie within the 852-acre parcel  
24 leased to PGE by the Port of St. Helens and situated within Section 15, Township 8 North, Range  
25 4 West, Willamette Meridian.  
26

27 **Reclaimed Wastewater Pipeline Corridor.** Water discharged from the energy facility will be  
28 returned to the Columbia River about one-half mile northwest of the energy facility. The  
29 reclaimed water pipeline corridor will be about 100 feet wide and 2,400 feet long, will cover an  
30 area of about 6 acres, and will lie primarily within the 852-acre parcel leased to PGE by the Port  
31 of St. Helens and situated within Section 15 and 16, Township 8 North, Range 4 West,  
32 Willamette Meridian.  
33

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

36 Alternative One. Under this alternative, the energy facility will deliver electric power to  
37 the BPA Allston Substation near Alston, Oregon, by means of a new 230-kV circuit on  
38 monopole steel structures, except where it will have to cross the existing BPA lines. A  
39 separate 230 kV circuit will carry the output of the Summit Project on the same  
40 structures, as noted above. The new transmission line will be routed on an existing PGE  
41 right-of-way that is 250 feet wide, except at the BPA Allston Substation where a new  
42 right-of-way may be required. The structures will be placed on or near the centerline of  
43 the unused north half of the right-of-way. The transmission line corridor will be about  
44 125 feet wide and 10 miles long, will occupy an area of about 300 acres, and will pass

1 through Sections 15, 22, 23, 26, 35 and 36, Township 8 North, Range 4 West, and  
2 Sections 31, 5, 6, 4, 3 and 10, Township 7 North, Range 3 West, Willamette Meridian.

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

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

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

24  
25 **D. COUNCIL SITING STANDARDS**

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

28 [No Conditions]

29  
30 **D.2. ORGANIZATIONAL EXPERTISE**

- 31  
32 (1) The Certificate Holder shall report to the Office of Energy (“Office”) in a timely manner  
33 any change in the ownership of Portland General Electric Company (“PGE”).  
34  
35 (2) Before beginning construction of the energy facility, the Port Westward to Bonneville  
36 Power Administration (“BPA”) Allston Substation Transmission Line, or other related or  
37 supporting facilities, the Certificate Holder shall identify to the Energy Facility Siting  
38 Council (“Council”) whom it has chosen to act in the role of the engineering,  
39 procurement and construction (“EPC”) contractor(s) for specific portions of the work.  
40  
41 (3) If the Certificate Holder chooses a third-party contractor to operate the facility, the  
42 Certificate Holder shall submit to the Council the identity of the contractor so the Council  
43 may review the qualifications and capability of the contractor to meet the standards of  
44 OAR 345-0022-0010. If the Council finds that a new contractor meets these standards,

1 the Council shall not require an amendment to the Site Certificate for the Certificate  
2 Holder to hire the contractor.  
3

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

9 (5) The Certificate Holder shall contractually require the EPC contractor(s) and all  
10 independent contractors and subcontractors involved in the construction and operation of  
11 the facility to comply with all applicable laws and regulations and with the terms and  
12 conditions of the Site Certificate. Such contractual provision shall not operate to relieve  
13 the Certificate Holder of responsibility under the Site Certificate.  
14

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

19 (7) Before beginning construction of the energy facility, the Certificate Holder shall deliver  
20 to the Office a copy of the agreement between the Certificate Holder and the Port of St.  
21 Helens that provides that the Certificate Holder may use at least 8.3 cubic feet per second  
22 of the water right held by the Port of St. Helens under Permit to Appropriate the Public  
23 Waters, issued by the State of Oregon, Water Resources Department, Permit No. 53677.  
24

25 (8) Before beginning construction of the energy facility, the Certificate Holder shall deliver  
26 to the Office evidence that the Oregon Department of Environmental Quality has issued  
27 to the Port of St. Helens a National Pollutant Discharge Elimination System (“NPDES”)  
28 permit that provides for the discharge of non-sanitary wastewater from the Port Westward  
29 Industrial Site, including all non-sanitary wastewater produced by the energy facility.  
30

31 (9) Before beginning construction of the energy facility, the Certificate Holder shall deliver  
32 to the Office a copy of the agreement between the Certificate Holder and the Port of St.  
33 Helens that provides for discharge of non-sanitary wastewater from the energy facility by  
34 means of the NPDES permit issued to the Port of St. Helens.  
35

### 36 **D.3. RETIREMENT AND FINANCIAL ASSURANCE** 37

38 (1) The Certificate Holder shall retire the facility if the Certificate Holder permanently ceases  
39 construction or operation of the facility. The Certificate Holder shall retire the facility  
40 according to a final retirement plan approved by the Council, as described in OAR 345-  
41 027-0110, and prepared pursuant to Condition D.3(2).  
42

43 (2) Two years before closure of the energy facility, the Certificate Holder shall submit to the  
44 Office a proposed final retirement plan for the facility and site, pursuant to OAR 345-  
45 027-0110, including:

- 1
- 2 (a) A plan for retirement that provides for completion of retirement within two years
- 3 of permanent cessation of operation of the energy facility and that protects the
- 4 public health and safety and the environment;
- 5
- 6 (b) A description of actions the Certificate Holder proposes to take to restore the site
- 7 to a useful, non-hazardous condition; and,
- 8
- 9 (c) A detailed cost estimate, a comparison of that estimate with the dollar amount
- 10 secured by a bond or letter of credit and any amount contained in a retirement
- 11 fund, and a plan for assuring the availability of adequate funds for completion of
- 12 retirement.
- 13
- 14 (3) The Certificate Holder shall prevent the development of any conditions on the site that
- 15 would preclude restoration of the site to a useful, non-hazardous condition to the extent
- 16 that prevention of such site conditions is within the control of the Certificate Holder.
- 17
- 18 (4) Notwithstanding Conditions D.3(1), D.3(2), and D.3(3), if the Certificate Holder begins
- 19 construction of the Port Westward to BPA Allston Substation Transmission Line before
- 20 beginning construction of the energy facility and other related or supporting facilities,
- 21 Conditions D.3(1), D.3(2), and D.3(3) shall apply to that transmission line separately for
- 22 as long as it is under construction or operation independent of the energy facility; and, a
- 23 retirement plan that the Certificate Holder submits may provide that the Port Westward to
- 24 BPA Allston Substation Transmission Line remains in operation to serve other energy
- 25 facilities.
- 26
- 27 (5) Before beginning construction of the energy facility, the Certificate Holder shall submit
- 28 to the State of Oregon, through the Council, a bond or letter of credit in the amount of
- 29 \$8,640,000 (in 2002 dollars as of the second quarter) naming the State of Oregon, acting
- 30 by and through the Council, as beneficiary or payee.
- 31
- 32 (a) In the event the Certificate Holder begins construction of the Port Westward to
- 33 BPA Allston Substation Transmission Line before beginning construction of the
- 34 energy facility, the Certificate Holder shall submit to the State of Oregon, through
- 35 the Council, a bond or letter of credit in the amount of \$394,000 (in 2002 dollars
- 36 as of the second quarter).
- 37
- 38 (b) If the Certificate Holder has previously begun construction of the Port Westward
- 39 to BPA Allston Substation Transmission Line, the Certificate Holder shall
- 40 increase the amount of such bond or letter of credit to \$8,640,000 (in 2002 dollars
- 41 as of the second quarter) before beginning construction of the energy facility.
- 42
- 43 (c) The form of the bond or letter of credit and identity of the issuer shall be subject
- 44 to approval by the Council.
- 45

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

1 Holder shall correct such deficiencies within six months after completion of the  
2 corresponding Phase I Environmental Site Assessment. It shall promptly report its  
3 corrective actions to the Office. The Council shall determine whether the corrective  
4 actions are sufficient.

5  
6 (11) The Certificate Holder shall report any release of hazardous substances, pursuant to DEQ  
7 regulations, to the Office within one working day after the discovery of such release.  
8 This obligation shall be in addition to any other reporting requirements applicable to such  
9 a release.

10  
11 (12) If the Certificate Holder has not remedied a release consistent with applicable Oregon  
12 Department of Environmental Quality standards or if the Certificate Holder fails to  
13 correct deficiencies identified in the course of a Phase I Environmental Site Assessment  
14 within six months after the date of the release or the date of completion of the Phase I  
15 Environmental Site Assessment, the Certificate Holder shall submit within such six-  
16 month period to the Council for its approval an independently prepared estimate of the  
17 additional cost of remediation or correction.

18  
19 (a) Upon approval of an estimate by the Council, the Certificate Holder shall increase  
20 the amount of its bond or letter of credit by the amount of the estimate.

21  
22 (b) In no event, however, shall the Certificate Holder be relieved of its obligation to  
23 exercise all due diligence in remedying a release of hazardous substances or  
24 correcting deficiencies identified in the course of a Phase I Environmental Site  
25 Assessment.

26  
27 (13) All funds received by the Certificate Holder from the salvage of equipment and buildings  
28 shall be committed to the restoration of the energy facility site to the extent necessary to  
29 fund the approved site restoration and remediation.

30  
31 (14) The Certificate Holder shall pay the actual cost to restore the site to a useful, non-  
32 hazardous condition at the time of retirement, notwithstanding the Council's approval in  
33 the Site Certificate of an estimated amount required to restore the site.

34  
35 (15) If the Council finds that the Certificate Holder has permanently ceased construction or  
36 operation of the facility without retiring the facility according to a final retirement plan  
37 approved by the Council, as described in OAR 345-027-0110 and prepared pursuant to  
38 Condition D.3(2), the Council shall notify the Certificate Holder and request that the  
39 Certificate Holder submit a proposed final retirement plan to the Office within a  
40 reasonable time not to exceed 90 days.

41  
42 (a) If the Certificate Holder does not submit a proposed final retirement plan by the  
43 specified date or if the Council rejects the retirement plan that the Certificate  
44 Holder submits, the Council may direct the Office to prepare a proposed a final  
45 retirement plan for the Council's approval.

- 1  
2 (b) Upon the Council’s approval of the final retirement plan prepared pursuant to  
3 subsection (a), the Council may draw on the bond or letter of credit described in  
4 Condition D.3(5) and shall use the funds to restore the site to a useful, non-  
5 hazardous condition according to the final retirement plan, in addition to any  
6 penalties the Council may impose under OAR Chapter 345, Division 29.  
7  
8 (c) If the amount of the bond or letter of credit is insufficient to pay the actual cost of  
9 retirement, the Certificate Holder shall pay any additional cost necessary to  
10 restore the site to a useful, non-hazardous condition.  
11  
12 (d) After completion of site restoration, the Council shall issue an order to terminate  
13 the Site Certificate if the Council finds that the facility has been retired according  
14 to the approved final retirement plan.  
15

16 **D.4. LAND USE**

- 17  
18 (1) Before beginning construction of the energy facility, the Certificate Holder shall submit a  
19 landscaping plan for the energy facility to Columbia County as part of its building permit  
20 application for the energy facility. The landscaping plan shall be subject to County  
21 approval, provided that the plan is consistent with this Site Certificate and the Final  
22 Order. The Certificate Holder shall implement the landscaping plan.  
23  
24 (2) Before beginning construction of the energy facility, the Certificate Holder shall submit a  
25 site plan to Columbia County as part of its building permit application.  
26  
27 (3) Before beginning construction of the energy facility, the Certificate Holder shall submit  
28 to Columbia County as part of its building permit application for the energy facility a  
29 final parking lot plan that complies with Section 1400 of the Columbia County Zoning  
30 Ordinance. The parking plan shall be consistent with this Site Certificate and Attachment  
31 D of the Final Order. The Certificate Holder shall implement the parking lot plan.  
32  
33 (4) Before beginning construction of the energy facility or the Port Westward to BPA Allston  
34 Substation Transmission Line, as appropriate, the Certificate Holder shall apply for and  
35 obtain all appropriate land use permits from Columbia County and the City of Rainier.  
36  
37 (5) Before beginning construction of the energy facility, the Certificate Holder shall enter  
38 into a written contract with Columbia County that recognizes the rights of land owners  
39 who are adjacent to and nearby the corridor for the transmission line from the BPA  
40 Allston Substation to the Trojan Nuclear Plant where it crosses PF-76 and FA-19 zones to  
41 conduct forest operations consistent with the Forest Practices Act and Rules for uses  
42 authorized in OAR 660-006-0025, subsections (4)(e), (m), (s), (t), and (w).  
43

1 **D.5. STRUCTURAL STANDARD**

- 2
- 3 (1) The Certificate Holder shall design, engineer and construct the facility to avoid dangers  
4 to human safety presented by seismic hazards affecting the site that are expected to result  
5 from all maximum probable seismic events. In no event shall the recommended seismic  
6 design parameters be any less than those prescribed by the Oregon Uniform Building  
7 Code. As used in this condition, “seismic hazard” includes ground shaking, landslide,  
8 liquefaction, lateral spreading, tsunami inundation, fault displacement, and subsidence.  
9
- 10 (2) If the Certificate Holder does not have subsurface information for design of the  
11 transmission lines that is acceptable to the Office and the Oregon Department of Geology  
12 and Mineral Industries (“DOGAMI”), then the Certificate Holder shall drill exploratory  
13 borings at critical locations during final design of the proposed transmission lines.  
14
- 15 (3) Before beginning construction of the facility, the Certificate Holder shall provide the  
16 Office and DOGAMI with a report containing results of geotechnical investigations and  
17 recommendations for the design of the energy facility, transmission lines and other  
18 related or supporting facilities.  
19
- 20 (a) The Certificate Holder shall prepare the report consistent with the study designs  
21 detailed in the Section D.5 of the Final Order and Section H.3 of the Application  
22 for a Site Certificate (“ASC”).  
23
- 24 (b) If DOGAMI is not able to review the reports, the Office shall arrange, in  
25 consultation with DOGAMI, for an independent review of the report by a  
26 qualified registered geologist.  
27
- 28 (c) If the Certificate Holder begins construction of the Port Westward to BPA Allston  
29 Substation Transmission Line before beginning construction of other parts of the  
30 facility, Condition D.5(3) shall apply only to the Port Westward to BPA Allston  
31 Substation Transmission Line as long as it is the only part of the facility under  
32 construction.  
33
- 34 (4) In addition to, or concurrent with Condition D.5(3), before beginning construction within  
35 the City of Rainier's Watershed zone, the Certificate Holder shall submit to the City of  
36 Rainier, the Office and DOGAMI a geotechnical report prepared by a registered engineer  
37 establishing that it can safely accomplish any construction in a known slide hazard area,  
38 flood hazard area, or drainage way, or on slopes exceeding 20 percent in that zone.  
39
- 40 (5) If the geotechnical investigation reveals evidence that is not described in the ASC, the  
41 Certificate Holder shall revise the facility design parameters to comply with appropriate  
42 Uniform Building Code requirements.  
43
- 44 (6) The Certificate Holder shall notify the Office, the State Building Codes Division and  
45 DOGAMI promptly if site investigations or trenching reveals that subsurface conditions

1 differ significantly from those described in the ASC. After the Office receives the notice,  
2 the Council may require the Certificate Holder to consult with DOGAMI and the  
3 Building Codes Division and to propose mitigation actions.

4  
5 (7) The Certificate Holder shall notify the Office, the Building Codes Division and  
6 DOGAMI promptly if shear zones, artesian aquifers, deformations, or clastic dikes are  
7 found at or in the vicinity of the facility site.

8  
9 (8) The Certificate Holder shall design, engineer and construct the facility to avoid dangers  
10 to human safety presented by non-seismic or aseismic hazards affecting the site. As used  
11 in this condition, "non-seismic or aseismic hazards" includes settlement, landslides,  
12 groundwater, flooding, and erosion.

13  
14 **D.6. SOIL PROTECTION**

15  
16 (1) Upon completion of construction in an area, the Certificate Holder shall use native seed  
17 mixes to restore vegetation to the extent practicable and shall landscape portions of the  
18 site disturbed by construction in a manner compatible with the surroundings and  
19 proposed use. Conditions D.6(1) through D.6(6) shall apply to all soil disturbing  
20 activities, including maintenance, repair or reconstruction of facilities.

21  
22 (2) The Certificate Holder shall employ the following measures to control soil erosion and  
23 sediment runoff by water and wind erosion:

24  
25 (a) Avoid excavation and other soil disturbances beyond that necessary for  
26 construction of the facility or confine equipment use to specific areas.

27  
28 (b) Remove vegetation only as necessary.

29  
30 (c) Apply water or mulch, as necessary, for wind erosion control during construction.

31  
32 (d) Revegetate those construction areas that will no longer be used.

33  
34 (e) Use temporary erosion and sediment control measures, such as sediment fences,  
35 straw wattles, bio-filter bags, mulch, permanent and temporary seeding, sediment  
36 traps and/or basins, rock check dams or gravel filter berms, and gravel  
37 construction entrances, and maintain these features throughout construction and  
38 restoration to reduce the potential for soil erosion and sediment runoff.

39  
40 (f) Protect soil stockpiles with mulch and plastic sheeting.

41  
42 (3) If excessively wet conditions occur during construction, the Certificate Holder shall limit  
43 construction activities during such periods to the degree practicable in areas susceptible  
44 to soil compaction.

- 1 (4) After completing construction in an area, the Certificate Holder shall monitor the  
2 construction area for a period of 12 months to evaluate whether construction-related  
3 impacts to soils are being adequately addressed by the mitigation procedures described in  
4 the Sediment Erosion and Control Plan. It shall submit its quality assurance measures to  
5 the Office for approval before beginning monitoring.  
6
- 7 (5) After completing construction in an area, the Certificate Holder shall use the results of the  
8 monitoring program in Condition D.6(4) to identify remaining soil impacts associated  
9 with construction that require mitigation. As necessary, the Certificate Holder shall  
10 implement follow-up restoration measures to address those remaining impacts and shall  
11 report in a timely manner to the Office what measures it has taken.  
12
- 13 (6) The Certificate Holder shall remove trapped sediment when the capacity of the sediment  
14 trap has been reduced by 50 percent and shall place such sediment in an upland area  
15 certified by a qualified wetland specialist.  
16
- 17 (7) The Certificate Holder shall contain all fuel and chemical storage in paved spill  
18 containment areas with a curb.  
19
- 20 (8) The Certificate Holder shall design all inside spill containment areas to hold at least  
21 110 percent of the volume of liquids stored within them.  
22
- 23 (9) The Certificate Holder shall design all spill containment areas located outdoors to hold at  
24 least 110 percent of the volume of liquids stored within them, together with the volume of  
25 precipitation that might accumulate during the 100-year return frequency storm.  
26
- 27 (10) During operation, the Certificate Holder shall minimize drift from the cooling towers  
28 through the use of high efficiency drift eliminators that allow no more than 0.002 percent  
29 drift.  
30

#### 31 **D.7. PROTECTED AREAS**

32 [No Conditions]  
33

#### 34 **D.8. FISH AND WILDLIFE HABITAT**

- 35
- 36 (1) The Certificate Holder shall, to the extent practicable, avoid and, where avoidance is not  
37 possible, minimize construction and operation disturbance to areas of native vegetation  
38 and areas that provide important wildlife habitat. With respect to construction of the  
39 facility, the Certificate Holder shall mitigate possible impacts to wildlife by measures  
40 including, but not limited to, the following:  
41
- 42 (a) Posting speed limit signs throughout the energy facility construction zone.  
43

- 1 (b) Instructing construction personnel, including construction contractors and their  
2 personnel, on sensitive wildlife of the area and on required precautions to avoid  
3 injuring or destroying wildlife.  
4
- 5 (c) Instructing construction personnel, including construction contractors and their  
6 personnel, to watch out for wildlife while driving through the facility site, to  
7 maintain reasonable driving speeds so as not to harass or strike wildlife  
8 accidentally, and to be cautious and drive at slower speeds in a period from one  
9 hour before sunset to one hour after sunrise when some wildlife species are the  
10 most active.  
11
- 12 (d) Requiring construction personnel, including construction contractors and their  
13 personnel, to report any injured or dead wildlife detected at the facility site.  
14
- 15 (2) The Certificate Holder shall construct, operate and retire the facility to minimize impacts  
16 to vegetation and habitat.
- 17 (a) The energy facility shall be located within previously disturbed Habitat Category  
18 6, non-native grassland Habitat Category 4, and palustrine emergent and  
19 forested/scrub-shrub wetlands Habitat Category 3.
- 20 (b) The Certificate Holder shall limit Habitat Category 3 impacts to 0.43 acres of  
21 permanent impact within palustrine emergent and forested/scrub-shrub wetlands.
- 22 (3) The Certificate Holder shall site transmission towers outside wetlands and waterways to  
23 the greatest extent practicable. If the Certificate Holder must site transmission towers in  
24 riparian zones or wetlands, the Certificate Holder shall use a monopole design for the  
25 transmission towers to minimize ground impacts and vegetation control, except where it  
26 would have to cross the existing BPA lines.
- 27 (4) The Certificate Holder shall prohibit construction and maintenance equipment from  
28 entering perennial and intermittent streams, except as follows:  
29
- 30 (a) Construction equipment may cross a stream if it is dry;  
31
- 32 (b) Construction equipment may cross streams that are not dry by using temporary  
33 structures to bridge the stream in a manner that minimizes disturbance to the bed,  
34 banks and water of the stream;  
35
- 36 (c) Construction equipment may cross a wet stream if the Certificate Holder notifies  
37 the Division of State Lands, the Oregon Department of Fish and Wildlife  
38 (“ODFW”) and the Office of its intent to cross the stream prior to the crossing and  
39 these agencies concur that the crossing is acceptable.  
40
- 41 (A) The Certificate Holder shall return any stream bed or bank that it disturbs  
42 during construction or maintenance to conditions that are comparable to

- 1 pre-disturbed conditions, including stabilizing the bed and banks and  
2 revegetating the riparian area with appropriate plant species.  
3
- 4 (B) The Certificate Holder shall construct wet stream crossings within the  
5 ODFW-designated in-water work period.  
6
- 7 (C) The Certificate Holder shall keep the wet stream crossing width to the  
8 minimum needed.  
9
- 10 (5) The Certificate Holder shall take advantage of existing roads to the extent practicable.
- 11 (6) Before beginning construction of the energy facility or beginning construction of the  
12 transmission lines, and in the appropriate season, the Certificate Holder shall conduct  
13 wildlife surveys within 0.25 miles of the site to locate great blue heron rookeries. Should  
14 it locate rookeries, the Certificate Holder shall consult with ODFW and the Office to  
15 determine the action necessary to avoid adverse impacts. If it cannot avoid impacts, the  
16 Certificate Holder shall suspend construction in the affected areas during the critical  
17 nesting period of the species, as determined by the Office in consultation with ODFW.
- 18 (7) During construction of the energy facility, the Certificate Holder shall relocate the  
19 existing osprey nest platform to an ODFW-approved location for the period between  
20 October 1 and March 30.
- 21 (8) Before beginning construction of the facility, the Certificate Holder shall conduct pre-  
22 construction surveys within the analysis area and establish construction buffers around  
23 raptor nests during the nesting season, as approved by ODFW. If it is not practical for  
24 the Certificate Holder to avoid the nests of non-listed, threatened or endangered raptor  
25 species, the Certificate Holder shall implement in a timely manner a mitigation project  
26 approved by ODFW that meets the requirements of the Habitat Mitigation policy for “no  
27 net loss” appropriate to the Habitat Category.
- 28 (9) The Certificate Holder shall schedule construction at the existing raw water intake pump  
29 station to avoid the purple martin nesting season (April 1 through June 30). Before  
30 beginning construction at the existing raw water intake pump station, the Certificate  
31 Holder shall conduct a survey to determine the exact location of any purple martin nests.  
32 Should the Certificate Holder cause unavoidable impacts to occur to any purple martin  
33 nest, it shall construct, install and maintain an artificial nest site at a nearby location. It  
34 shall pick an appropriate location in consultation with ODFW and the Office.
- 35 (10) When working around riparian areas or waterways, the Certificate Holder shall use only  
36 herbicide labeled for use in those areas. The Certificate Holder shall abide by all labeling  
37 instructions when using herbicides for vegetation maintenance associated with the energy  
38 facility and transmission lines rights-of-way.

- 1 (11) The Certificate Holder shall locate chemical storage, servicing of construction and  
2 maintenance equipment and vehicles, and overnight storage of wheeled vehicles at least  
3 330 feet from any wetland or waterway.
- 4 (12) The Certificate Holder shall not construct any structure (other than fences and signs)  
5 within 50 feet of any Class I river, stream or the emergent vegetation adjacent to such a  
6 river or stream or within 25 feet of any other rivers, streams, and sloughs or the emergent  
7 vegetation adjacent to such a river, stream, or slough.
- 8 (13) To mitigate for impacts to 19 acres of non-native grassland, the Certificate Holder shall  
9 protect 19 acres of on-site emergent wetland habitat identified in the ASC by execution of  
10 a conservation easement for the life of the energy facility. Before beginning construction  
11 of the energy facility, the Certificate Holder shall provide a copy of the conservation  
12 easement or similar conveyance to the Office.
- 13 (14) The Certificate Holder shall restore temporary upland and wetland disturbance areas by  
14 returning the areas to their original grade and seeding, with appropriate seed mixes as  
15 recommended by ODFW and as shown in Table P-7 (ASC, Exhibit P, page P-34), and by  
16 mulching the areas with straw. The Certificate Holder shall obtain ODFW and Office  
17 concurrence before changing the proposed seed mix.
- 18 (15) The Certificate Holder shall not clear any more riparian vegetation than is necessary for  
19 the permitted land use, including clearing required for safety purposes, during  
20 construction or operation of the facility.
- 21 (16) During construction of the transmission line(s) and maintenance of the rights-of-way, the  
22 Certificate Holder shall limit clearing of vegetation in riparian areas and wetlands to that  
23 needed to prevent contact with the transmission line and to meet clearance standards for  
24 safety and transmission line reliability.
- 25 (17) The Certificate Holder shall mitigate for impacts to riparian shrub and forest habitat that  
26 result in canopy cover of less than 25 percent by revegetating these areas with appropriate  
27 native woody species according to the Typical Revegetation Plan (ASC, Exhibit Q, page  
28 Q-6.1).
- 29 (18) The Certificate Holder shall, as soon as practicable and appropriate after completing  
30 construction in an area, implement the mitigation measures specified in Conditions  
31 D.8(13), D.8(14) and D.8(17).
- 32 (19) The Certificate Holder shall monitor revegetated areas for a period of five years and shall  
33 ensure that new vegetation has an 80 percent survival rate.
- 34 (20) The Certificate Holder shall monitor and control nuisance and invasive plant species  
35 annually for a period of five years in areas where vegetation removal and/or revegetation  
36 has occurred in (1) riparian areas and wetlands along the transmission line rights-of-way,

1 and (2) in areas temporarily disturbed by construction of the raw water, gas, and process  
2 water discharge lines.

3 (21) The Certificate Holder shall submit an annual monitoring report to ODFW and the Office  
4 during the five-year monitoring period specified in Condition D.8(20).

5 (22) Within one year after completion of construction of the facility or the Port Westward to BPA  
6 Allston Substation Transmission Line, if constructed separately, the Certificate Holder shall  
7 provide a summary report to ODFW and the Office that identifies the revegetation actions it  
8 took and the results of revegetation monitoring conducted to that time.

9 (23) Within three months after completion of the final annual monitoring survey, the  
10 Certificate Holder shall provide a report to ODFW and the Office that presents the results  
11 of its revegetation monitoring.

12 (24) If revegetation is not successful at establishing appropriate plant cover and controlling  
13 erosion, the Certificate Holder shall take remedial actions as the Office directs.  
14

#### 15 **D.9 THREATENED AND ENDANGERED SPECIES**

16  
17 (1) Before beginning construction of the transmission line between the BPA Allston  
18 Substation and the Trojan Nuclear Plant, the Certificate Holder shall direct qualified  
19 personnel to conduct species ground surveys along the transmission line corridor and  
20 within 150 feet on either side of the transmission line corridor at the appropriate time of  
21 year to determine the presence of listed plant species. If listed plant species are identified  
22 in the course of the species ground surveys, their presence shall be noted on maps, and  
23 PGE shall provide copies of the maps to the Office and the Department of Agriculture.  
24

25 (2) During construction of the transmission lines, the Certificate Holder shall manipulate  
26 construction equipment and site poles, towers and access roads to avoid impacts, except  
27 as provided in Condition D.9(4), to known populations of state- or federally-listed plant  
28 species.  
29

30 (3) The Certificate Holder shall ensure that all maintenance practices along the transmission  
31 line corridor minimize impacts to known populations of listed plant species.  
32

33 (4) In the event the Certificate Holder determines that it cannot avoid known populations of  
34 listed plant species, the Certificate Holder shall engage qualified personnel to determine  
35 whether the proposed action has the potential to reduce appreciably the likelihood of the  
36 survival or recovery of the listed species, notify the Office of its findings, and obtain  
37 approval from the Oregon Department of Agriculture before proceeding with  
38 construction activities that affect the listed plant species. (OAR 603-073-0090).  
39

40 (5) Before beginning construction of the transmission line, the Certificate Holder shall  
41 employ measures to protect raptors in the design and construction of transmission lines.

1 It shall design all energized transmission conductors with either a minimum separation of  
2 nine feet or other measures to reduce the potential for electrocution of raptors or other  
3 birds.

4  
5 (6) The Certificate Holder shall not construct at the transmission line terminus at the Trojan  
6 Nuclear Plant during the critical peregrine falcon nesting period from January 1 to  
7 June 30.

8  
9 (7) The Certificate Holder shall plant suitable vegetative species for deer forage and cover  
10 within the wetland mitigation/enhancement area.

11  
12 (8) The Certificate Holder shall coordinate with ODFW about whether to conduct site-  
13 specific fish sampling at waterways that do not have confirmation of species presence or  
14 absence along the transmission line corridor. If ODFW recommends that the Certificate  
15 Holder conduct site-specific sampling, the Certificate Holder shall do so and report the  
16 results to ODFW and the Office.

17  
18 **D.10. SCENIC AND AESTHETIC VALUES**

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

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

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

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

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

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

44

1 (7) After completion of construction of related and supporting pipelines in an area, the  
2 Certificate Holder shall re-vegetate any undeveloped areas disturbed by construction  
3 activities using native species, including grasses, shrubs, and trees. If necessary, the  
4 Certificate Holder shall water re-vegetated areas on a regular basis until the plant species  
5 have been successfully established.  
6

7 **D.11. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES**  
8

9 (1) Before beginning construction of the Port Westward to BPA Allston Substation  
10 Transmission Line or the BPA Allston Substation to Trojan Transmission Line, the  
11 Certificate Holder shall complete an archaeological survey of the approved transmission  
12 line corridors in consultation with the Oregon Historic Preservation Office (“SHPO”), the  
13 Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the  
14 Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes  
15 of the Siletz Indian Reservation of Oregon, the Chinook Tribe in Washington, and  
16 appropriate federal agencies, document its findings, and present those findings to the  
17 Office.  
18

19 (2) During construction of the facility, the Certificate Holder shall ensure that a qualified  
20 person instructs construction personnel in the identification of cultural materials.  
21

22 (3) During construction of the facility, in the event any artifacts or other cultural materials  
23 are identified, the Certificate Holder shall cease all ground-disturbing activities until a  
24 qualified archeologist can evaluate the significance of the find. If the archeologist  
25 determines that the materials are significant, the Certificate Holder shall make  
26 recommendations to the Council for mitigation in consultation with SHPO, the Office,  
27 the tribes, and other appropriate parties. Mitigation measures shall include avoidance or  
28 data recovery. The Certificate Holder shall not restart work in the affected area until it  
29 has demonstrated to the Office that it has complied with the archeological permit  
30 requirements administered by SHPO.  
31

32 (4) The Certificate Holder shall allow monitoring by the Confederated Tribes of the Warm  
33 Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand Ronde  
34 Community of Oregon, the Confederated Tribes of the Siletz Indian Reservation of  
35 Oregon, and the Chinook Tribe in Washington of earth-moving activities within any  
36 areas with a potential for containing archaeological remains.  
37

38 (5) Before beginning construction of the facility or of the Port Westward to BPA Allston  
39 Substation Transmission Line separately, the Certificate Holder shall notify the  
40 Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the  
41 Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes  
42 of the Siletz Indian Reservation of Oregon, and the Chinook Tribe in Washington and  
43 provide their representatives the opportunity to be available for periodic on-site  
44 monitoring during construction activities.  
45

1 **D.12. RECREATION**

2 [No Conditions]

3  
4 **D.13. PUBLIC SERVICES**

5  
6 (1) During construction, the Certificate Holder shall hire a contractor to provide chemical  
7 toilet services or other appropriate facilities for construction personnel.

8  
9 (2) The Certificate Holder shall pay to Columbia County or its designee the appropriate  
10 Transportation Improvement Contribution (“TIC”) set forth in Section 2.1 of the  
11 Agreement between Columbia County and Portland General Electric Company dated  
12 June 5, 2002 (“Agreement”).

13  
14 (3) The Certificate Holder shall not agree to amend the Agreement with Columbia County to  
15 reduce, revoke or waive the requirement for payment of the appropriate TIC without prior  
16 approval of the Council; however, such approval by the Council shall not require an  
17 amendment to the Site Certificate.

18  
19 (4) Before beginning construction of the energy facility, the Certificate Holder shall  
20 coordinate with Columbia County the improvement and maintenance of signage and  
21 striping at the mainline rail crossing on Kallunki Road, including the installation of “Do  
22 NOT STOP ON TRACKS” signs.

23  
24 (5) If construction of the energy facility occurs concurrently with construction of other  
25 projects in the Port Westward Industrial Area, the Certificate Holder shall coordinate  
26 with other users of the Port Westward Industrial Area to provide a carpooling program  
27 that identifies and/or creates park-and-ride locations to facilitate carpooling.

28  
29 (6) If construction of the energy facility occurs concurrently with construction of other  
30 projects in the Port Westward Industrial Area, the Certificate Holder shall coordinate  
31 with Columbia County and other users of the Port Westward Industrial Area on the  
32 implementation of a staggered shift schedule if Columbia County determines that traffic  
33 conditions warrant it.

34  
35 (7) During construction of the energy facility, the Certificate Holder shall use barge and  
36 railroad deliveries of bulk materials to the extent practicable to minimize the number of  
37 freight truck deliveries on local roads.

38  
39 (8) The Certificate Holder shall construct a fire protection system within the buildings and  
40 yard areas of the energy facility site that meets the requirements of the Uniform Fire  
41 Code, as amended by Oregon and the National Fire Protection Association standards, and  
42 all other applicable fire protection standards in effect at the time of construction.

43  
44 (9) The Certificate Holder shall provide a dedicated reserve capacity of 180,000 gallons in  
45 the raw water storage tank to serve as the fire suppression water source.

- 1  
2 (10) For fire truck access, the minimum inside turning radius of curves in the road system on  
3 the energy facility site shall be 40 feet.  
4

5 **D.14. WASTE MINIMIZATION, OAR 345-022-0120**  
6

- 7 (1) During construction, operation and retirement of the energy facility, the Certificate  
8 Holder shall separate recyclable materials from the solid waste stream to the extent  
9 practicable, store those materials on site until sufficient quantities exist to make recycling  
10 economic, and periodically deliver or sell those materials to a recycling facility.  
11  
12 (2) During construction, operation and retirement of the energy facility, the Certificate  
13 Holder shall segregate all used oil, mercury-containing lights, and lead-acid and nickel-  
14 cadmium batteries, store such materials on site, and deliver such materials to a recycling  
15 firm specializing in the proper disposal of such materials.  
16  
17 (3) Upon completion of construction, the Certificate Holder shall dispose of all temporary  
18 structures not required for facility operation and all timber, brush, refuse, and flammable  
19 or combustible material resulting from clearing of land and construction of the facility.  
20  
21 (4) During operation of the energy facility, the Certificate Holder shall convey all storm  
22 water and water discharges other than sanitary sewage to pervious areas to allow for  
23 percolation into the shallow groundwater.  
24  
25 (5) During operation of the energy facility, the Certificate Holder shall use internal recycling  
26 of aqueous streams whereby water shall be recycled several times in the cooling system  
27 before being discharged.  
28

29 **D.15. CARBON DIOXIDE STANDARD**  
30

- 31 (1) Before beginning construction of the energy facility, the Certificate Holder shall submit  
32 to The Climate Trust a bond or letter of credit in the amount of the monetary path  
33 payment requirement (in 2002 dollars) as determined by the calculations set forth in  
34 Condition D.15(3) and based on the estimated heat rates and capacities certified pursuant  
35 to Condition D.15(4) and as adjusted in accordance with the terms of this Site Certificate  
36 pursuant to Condition D.15(3)(c). For the purposes of this Site Certificate, the "monetary  
37 path payment requirement" means the offset funds determined pursuant to OAR 345-024-  
38 0550 and -0560 and the selection and contracting funds that the Certificate Holder must  
39 disburse to The Climate Trust, as the qualified organization, pursuant to OAR 345-024-  
40 0710 and this Site Certificate. The offset fund rate for the monetary path payment  
41 requirement shall be \$0.85 per ton of carbon dioxide (in 2002 dollars). The calculation of  
42 2002 dollars shall be made using the Index set forth in Condition D.3(5)(e) and as  
43 required below in subsection (g).  
44

- 1 (a) The form of the bond or letter of credit and identity of the issuer shall be subject  
2 to approval by the Council.  
3
- 4 (b) The form of the Memorandum of Understanding “MOU”) between the Certificate  
5 Holder and the Climate Trust establishing the disbursement mechanism to transfer  
6 selection and contracting funds and offset funds to The Climate Trust shall be  
7 substantially in the form of Attachment A to this Site Certificate.  
8
- 9 (c) Either the Certificate Holder or The Climate Trust may submit to the Council for  
10 the Council’s resolution any dispute between the Certificate Holder and The  
11 Climate Trust that concerns the terms of the bond, letter of credit, or MOU  
12 concerning the disbursement mechanism for the monetary path payments, or any  
13 other issues related to the monetary path payment requirement. The Council’s  
14 decision shall be binding on all parties.  
15
- 16 (d) The bond or letter of credit shall remain in effect until such time as the Certificate  
17 Holder has disbursed the full amount of the monetary path payment requirement  
18 to The Climate Trust. The Certificate Holder may reduce the amount of the bond  
19 or letter of credit commensurate with payments it makes to The Climate Trust.  
20 The bond or letter of credit shall not be subject to revocation before disbursement  
21 of the full monetary path payment requirement.  
22
- 23 (e) In the event that the Council approves a new Certificate Holder for the energy  
24 facility:
- 25
- 26 (A) The new Certificate Holder shall submit to the Council for the Council’s  
27 approval the form of a bond or letter of credit that provides comparable  
28 security to the bond or letter of credit of the current Certificate Holder.  
29 The Council’s approval of a new bond or letter of credit shall not require a  
30 site certificate amendment.  
31
- 32 (B) The new Certificate Holder shall submit to the Council for the Council’s  
33 approval the form of an MOU between the new Certificate Holder and The  
34 Climate Trust that is substantially in the form of Attachment A to this Site  
35 Certificate. In the case of a dispute between the new Certificate Holder  
36 and The Climate Trust concerning the disbursement mechanism for  
37 monetary path payments or any other issues related to the monetary path  
38 payment requirement, either party may submit the dispute to the Council  
39 for the Council’s resolution as provided in Condition D.15(1)(c). Council  
40 approval of a new MOU shall not require a site certificate amendment.  
41
- 42 (f) If calculations pursuant to Condition D.15(5) demonstrate that the Certificate  
43 Holder must increase its monetary path payments, the Certificate Holder shall  
44 increase the bond or letter of credit sufficiently to meet the adjusted monetary  
45 path payment requirement within the time required by Condition D.15(3)(c).

1 Alternately, the Certificate Holder may disburse any additional required funds  
2 directly to The Climate Trust within the time required by Condition D.15(3)(c).  
3

4 (g) The amount of the bond or letter of credit shall increase annually by the  
5 percentage increase in the Index, and the disbursement of funds shall be pro-rated  
6 within the year to the date of disbursement to The Climate Trust from the calendar  
7 quarter of Council approval of the Site Certificate.  
8

9 (2) The Certificate Holder shall disburse to The Climate Trust offset funds and selection and  
10 contracting funds as requested by The Climate Trust. The Certificate Holder shall make  
11 disbursements in response to requests from The Climate Trust in accordance with  
12 subsections (a), (b), and (c).  
13

14 (a) The Certificate Holder shall disburse all selection and contracting funds to The  
15 Climate Trust before beginning construction.  
16

17 (b) Upon notice pursuant to subsection (c), The Climate Trust may request from the  
18 issuer of the bond or letter of credit the full amount of all offset funds available or  
19 it may request partial payment of offset funds at its sole discretion.  
20 Notwithstanding the specific amount of any contract to implement an offset  
21 project, The Climate Trust may request up to the full amount of offset funds the  
22 Certificate Holder is required to provide to meet the monetary path payment  
23 requirement.  
24

25 (c) The Climate Trust may request disbursement of offset funds by providing notice  
26 to the issuer of the bond or letter of credit that The Climate Trust has executed a  
27 letter of intent to acquire an offset project. The Certificate Holder shall provide  
28 that the issuer of the bond or letter of credit disburse offset funds to The Climate  
29 Trust within three business days of a request by The Climate Trust for the offset  
30 funds in accordance with the terms of the bond or letter of credit.  
31

32 (3) The Certificate Holder shall submit all monetary path payment requirement calculations  
33 to the Office for verification in a timely manner before submitting a bond or letter of  
34 credit for Council approval and before entering into an MOU with The Climate Trust.  
35 The Certificate Holder shall use the contracted design parameters for capacities and heat  
36 rates that it reports pursuant to Condition D.15(4) to calculate the estimated monetary  
37 path payment requirement, along with the estimated annual hours of operation of power  
38 augmentation technologies. The Certificate Holder shall use the Year One Capacities and  
39 Year One Heat Rates that it reports for the facility pursuant to Condition D.15(5) to  
40 calculate whether it owes additional monetary path payments.  
41

42 (a) The net carbon dioxide emissions rate for the base load gas plant shall not exceed  
43 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power output,  
44 with carbon dioxide emissions and net electric power output measured on a new  
45 and clean basis, as defined in OAR 345-001-0010.

- 1  
2 (b) The net carbon dioxide emissions rate for incremental emissions for the facility  
3 operating with power augmentation technologies that increase the capacity and  
4 heat rate of the facility above the capacity and heat rate that it can achieve as a  
5 base load gas plant on a new and clean basis (“power augmentation  
6 technologies”) shall not exceed 0.675 pounds of carbon dioxide per kilowatt-hour  
7 of net electric power output, with carbon dioxide emissions and net electric power  
8 output measured on a new and clean basis, as the Office may modify such basis  
9 pursuant to Condition D.15(4)(d).  
10  
11 (c) When the Certificate Holder submits the Year One Test reports required in  
12 Condition D.15(5), it shall increase its monetary path payments if the calculation  
13 using reported data shows that the adjusted monetary path payment requirement  
14 exceeds the monetary path payment requirement for which the Certificate Holder  
15 had provided a bond or letter of credit before beginning construction, pursuant to  
16 Condition D.15(1). The Certificate Holder shall submit its calculations to the  
17 Office for verification.  
18  
19 (A) The Certificate Holder shall make the appropriate calculations and fully  
20 disburse any increased funds directly to The Climate Trust within 30 days  
21 of filing the Year One Test reports.  
22  
23 (B) In no case shall the Certificate Holder diminish the bond or letter of credit  
24 it provided before beginning construction or receive a refund from The  
25 Climate Trust based on the calculations made using the Year One  
26 Capacities and the Year One Heat Rates.  
27  
28 (4) The Certificate Holder shall include an affidavit certifying the heat rates and capacities  
29 reported in subsections (a) and (b).  
30  
31 (a) Before beginning construction of the energy facility, the Certificate Holder shall  
32 notify the Council in writing of its final selection of a gas turbine vendor and heat  
33 recovery steam generator vendor and shall submit written design information to  
34 the Council sufficient to verify the base-load gas plant’s designed new and clean  
35 heat rate (higher heating value) and its net power output at the average annual site  
36 condition.  
37  
38 (b) Before beginning construction of the energy facility, the Certificate Holder shall  
39 submit written design information to the Council sufficient to verify the facility’s  
40 designed new and clean heat rate and its net power output at the average annual  
41 site condition when operating with power augmentation technologies.  
42  
43 (c) Before beginning construction of the energy facility, the Certificate Holder shall  
44 specify the estimated annual average hours that it expects to operate the power  
45 augmentation technologies.

- 1  
2 (d) Upon a timely request by the Certificate Holder, the Office may approve modified  
3 parameters for testing the power augmentation technologies on a new and clean  
4 basis, pursuant to OAR 345-024-0590(1). The Office's approval of modified  
5 testing parameters for power augmentation technologies shall not require a site  
6 certificate amendment.  
7
- 8 (5) Within the first 12 months of commercial operation of the energy facility, the Certificate  
9 Holder shall conduct a 100-hour test at full power without power augmentation  
10 technologies ("Year One Test-1") and a test at full power with power augmentation  
11 technologies ("Year One Test-2"). A 100-hour test performed for purposes of the  
12 Certificate Holder's commercial acceptance of the facility shall suffice to satisfy this  
13 condition in lieu of testing after beginning commercial operation.  
14
- 15 (a) Year One Test-1 shall determine the actual heat rate ("Year One Heat Rate-1")  
16 and the net electric power output ("Year One Capacity-1") on a new and clean  
17 basis, without degradation, with the results adjusted for the average annual site  
18 condition for temperature, barometric pressure, and relative humidity, and using a  
19 rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel pursuant  
20 to OAR 345-001-0010(35).  
21
- 22 (b) Year One Test-2 shall determine the actual heat rate ("Year One Heat Rate-2")  
23 and net electric power output ("Year One Capacity-2") for the facility operating  
24 with power augmentation technologies, without degradation, with the results  
25 adjusted for the average annual site condition for temperature, barometric  
26 pressure and relative humidity, and using a rate of 117 pounds of carbon dioxide  
27 per million Btu of natural gas fuel pursuant to OAR 345-001-0010(35). The full  
28 power test shall be 100 hours duration unless the Office has approved a different  
29 duration pursuant to Condition (4)(d).  
30
- 31 (c) The Certificate Holder shall notify the Office at least 60 days before conducting  
32 the tests required in subsections (a) and (b) unless a shorter time is mutually  
33 agreed upon.  
34
- 35 (d) Before conducting the tests required in subsections (a) and (b), the Certificate  
36 Holder shall, in a timely manner, provide to the Office a copy of the protocol for  
37 conducting the tests.  
38
- 39 (e) Within two months after completing the Year One Tests, the Certificate Holder  
40 shall provide to the Council a report of the results of the Year One Tests.  
41
- 42 (6) If calculations pursuant to Condition D.15(7) demonstrate that the Certificate Holder  
43 must supplement its monetary path payments ("supplemental monetary path payment  
44 requirement"), the Certificate Holder shall provide a bond or letter of credit sufficient to  
45 meet the supplemental monetary path payment requirement within the time required by

1 Condition D.15(7)(b). The bond or letter of credit shall not be subject to revocation  
2 before disbursement of the supplemental monetary path payment requirement.  
3 Alternately, the Certificate Holder may disburse in cash any such supplemental monetary  
4 path payments directly to The Climate Trust within the time required by  
5 Condition D.15(7).  
6

7 (7) The Certificate Holder shall submit all supplemental monetary path payment requirement  
8 calculations to the Office for verification. The Certificate Holder shall use the Year One  
9 Capacity-2 and Year One Heat Rate-2 that it reports for the facility pursuant to Condition  
10 D.15(5)(b) to calculate whether it owes supplemental monetary path payments, pursuant  
11 to subsections (a) and (b).  
12

13 (a) Each five years after beginning commercial operation of the energy facility  
14 (“five-year reporting period”), the Certificate Holder shall report to the Office the  
15 annual average hours the facility operated with power augmentation technologies  
16 during that five-year reporting period, pursuant to OAR 345-024-0590(6). The  
17 Certificate Holder shall submit five-year reports to the Office within 30 days of  
18 the anniversary date of beginning commercial operation of the energy facility.  
19

20 (b) If the Office determines that the energy facility exceeds the projected net total  
21 carbon dioxide emissions calculated pursuant to Conditions D.15(4) and D.15(5),  
22 prorated for five years, during any five-year reporting period described in  
23 subsection (a), the Certificate Holder shall offset excess emissions for the specific  
24 reporting period according to subsection (A) and shall offset the estimated future  
25 excess emissions according to subsection (B), pursuant to OAR 345-024-0600(4).  
26 The Certificate Holder shall offset excess emissions using the monetary path as  
27 described in OAR 345-024-0710, except that contracting and selecting funds shall  
28 equal twenty (20) percent of the value of any offset funds up to the first \$250,000  
29 (in 2002 dollars) and 4.286 percent of the value of any offset funds in excess of  
30 \$250,000 (in 2002 dollars). The Certificate Holder shall disburse the funds to The  
31 Climate Trust within 30 days after notification by the Office of the amount that  
32 the Certificate Holder owes.  
33

34 (A) In determining the excess carbon dioxide emissions that the Certificate  
35 Holder must offset for a five-year period, the Office shall apply OAR 345-  
36 024-0600(4)(a). The Certificate Holder shall pay for the excess emissions  
37 at \$0.85 per ton of carbon dioxide emissions (in 2002 dollars). The Office  
38 shall notify the Certificate Holder and The Climate Trust of the amount of  
39 payment required, using the monetary path, to offset excess emissions.  
40

41 (B) The Office shall calculate estimated future excess emissions and notify the  
42 Certificate Holder of the amount of payment required, using the monetary  
43 path, to offset them. To estimate excess emissions for the remaining  
44 period of the deemed 30-year life of the facility, the Office shall use the  
45 parameters specified in OAR 345-024-0600(4)(b). The Certificate Holder

1 shall pay for the estimated excess emissions at \$ 0.85 per ton of carbon  
2 dioxide (in 2002 dollars). The Office shall notify the Certificate Holder of  
3 the amount of payment required, using the monetary path, to offset future  
4 excess emissions.  
5

6 (8) The combustion turbine for the base-load gas plant and power augmentation technologies  
7 shall be fueled solely with pipeline quality natural gas or with synthetic gas with a carbon  
8 content per million Btu no greater than pipeline-quality natural gas.  
9

10 (9) With respect to incremental capacity and fuel consumption increases for which the  
11 Certificate Holder has not previously complied with the carbon dioxide standard, the  
12 Certificate Holder shall comply substantially with Conditions D.15(1) through D.15(8) in  
13 lieu of the Council's requiring an amendment, provided that:  
14

15 (a) The Council determines, pursuant OAR 345-027-0050, that the Certificate Holder  
16 does not otherwise require an amendment, and further provided that:  
17

18 (b) The Certificate Holder shall meet the appropriate carbon dioxide emissions  
19 standard and monetary offset rate in effect at the time the Council makes its  
20 determination pursuant to OAR 345-027-0050.  
21

22 (10) Notwithstanding Conditions D.15(1) through d.15(9), if the Certificate Holder begins  
23 construction of the Port Westward to BPA Allston Substation Transmission Line, but no  
24 other part of the energy facility or other related or supporting facilities, the Certificate  
25 Holder shall not be required to comply with Conditions D.15(1) through D.15(9). The  
26 Certificate Holder shall comply with Conditions D.15(1) through D.15(9) in connection  
27 with construction of any part of the energy facility or related or supporting facilities other  
28 than the Port Westward to BPA Allston Substation Transmission Line.  
29

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

31 **E.1. REQUIREMENTS UNDER COUNCIL JURISDICTION**

32 **E.1.a. Noise**  
33

34 (1) During construction of the facility, the Certificate Holder shall schedule most heavy  
35 construction to occur during daylight hours. Construction work at night shall be limited  
36 to work inside buildings and other structures when possible.  
37

38 (2) During construction of the facility, the Certificate Holder shall require contractors to  
39 equip all combustion engine-powered equipment with exhaust mufflers.  
40

41 (3) During construction of the energy facility, transmission lines or other related or  
42 supporting facilities, the Certificate Holder shall establish a complaint response system at  
43 the construction manager's office to address noise complaints.  
44

- 1 (4) Within six months after the start of commercial operation of the energy facility, the  
2 Certificate Holder shall retain a qualified noise specialist to measure noise levels  
3 associated with the energy facility operation when environmental conditions are expected  
4 to result in maximum sound propagation between the source and the receivers and when  
5 the energy facility is operating in a typical operations mode that produces maximum  
6 noise levels.  
7
- 8 (a) The specialist shall measure noise levels at sites (1), (2), (5), and (6), as described  
9 in Exhibit X of the ASC, to determine if actual noise levels are within the levels  
10 specified in the applicable noise regulations in OAR 345-035-0035(1)(b)(B)(i).  
11
- 12 (b) The Certificate Holder shall report the results of the noise evaluation to the  
13 Office.  
14
- 15 (c) If actual noise levels do not comply with applicable DEQ regulations, the  
16 Certificate Holder shall take those actions necessary to comply with the  
17 regulations as soon as practicable.  
18
- 19 (d) If initial measurements show that actual noise levels increase at site (5) by 7 dBA  
20 or more, the Certificate Holder shall measure the noise levels as specified in this  
21 condition and shall repeat the process outlined in subsections (a), (b), and (c) for  
22 site (5) within six months after completion of the initial measurements.  
23
- 24 (5) The Certificate Holder shall install silencers on short duration noise sources (e.g. steam  
25 vents) from the heat recovery steam generator.  
26

27 **E.1.b. Wetlands and Removal/Fill Permit**  
28

- 29 (1) Before beginning construction of the energy facility or the Port Westward to BPA Allston  
30 Substation Transmission Line, as appropriate, the Certificate Holder shall obtain a U.S.  
31 Army Corps of Engineers and Oregon Division of State Lands Joint Removal/Fill Permit  
32 substantially in the form of the Removal/Fill Permit in Attachment C; provided, that  
33 mitigation required under the Removal/Fill Permit shall allow for accommodation of  
34 Corps of Engineers mitigation requirements, subject to the concurrence of the Office, in  
35 consultation with the Division of State Lands and affected federal agencies.  
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 compliance is  
39 required under the respective statutes and rules.  
40

41 **E.1.c. Public Health and Safety**  
42

- 43 (1) If local public safety authorities notify the Certificate Holder and the Office that the  
44 operation of the energy facility is contributing significantly to ground level fogging or  
45 icing along public roads and is likely to pose a significant threat to public safety, the

1 Certificate Holder shall cooperate with local public safety authorities regarding the  
2 posting of warning signs on affected roads and the implementation of other reasonable  
3 safety measures.

4  
5 (2) The Certificate Holder shall design the transmission lines so that alternating current  
6 electric fields shall not exceed 9 kV per meter at one meter above the ground surface in  
7 areas accessible to the public.

8  
9 (3) The Certificate Holder shall design the transmission lines so that induced currents and  
10 voltage resulting from the transmission lines are as low as reasonably achievable.

11  
12 (4) The Certificate Holder shall develop and implement a program that provides reasonable  
13 assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a  
14 permanent nature that could become inadvertently charged with electricity are grounded  
15 or bonded throughout the life of the transmission line.

16  
17 (5) The Certificate Holder shall restore or mitigate the reception of radio and television at  
18 residences and commercial establishments in the primary reception area to the level  
19 present before operation of the transmission line at no cost to residents or businesses  
20 experiencing interference resulting from the transmission line.

21  
22 (6) The Certificate Holder shall design, construct and operate the transmission lines in  
23 accordance with the requirements of the National Electrical Safety Code.

24  
25 (7) The Certificate Holder shall take reasonable steps to reduce or manage exposure to  
26 electromagnetic fields (EMF), consistent with Council findings presented in the "Report  
27 of EMF Committee to the Energy Facility Siting Council," March 30, 1993, and  
28 subsequent findings. Effective on the date of this Site Certificate, the Certificate Holder  
29 shall provide information to the public, upon request, about EMF levels associated with  
30 the energy facility and related transmission lines.

31  
32 (8) At least 30 days before beginning preparation of detailed design and specifications for the  
33 electrical transmission line(s) or the natural gas pipeline, the Certificate Holder shall  
34 consult with the Oregon Public Utility Commission staff to ensure that its designs and  
35 specifications are consistent with applicable codes and standards.

36  
37 (9) With respect to the related or supporting natural gas pipeline, the Certificate Holder shall  
38 design, construct and operate the pipeline in accordance with the requirements of the U.S.  
39 Department of Transportation as set forth in Title 49, Code of Federal Regulations,  
40 Part 192.

41  
42 **E.1.d. Water Pollution Control Facilities Permit**

43  
44 (1) Before beginning commercial operation of the energy facility, the Certificate Holder shall  
45 demonstrate that the DEQ has issued to the Certificate Holder a Water Pollution Control

1 Facilities Permit, substantially in the form of Attachment B.1, allowing for on-site  
2 sanitary waste disposal.

- 3  
4 (2) The Certificate Holder shall comply with state laws and rules applicable to Water  
5 Pollution Control Facilities Permits that are adopted in the future to the extent that such  
6 compliance is required under the respective statutes and rules.

7  
8 **F. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES**

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

10  
11 **Amendment of Site Certificate**

- 12 (1) The Council shall not change the conditions of the Site Certificate except in accordance  
13 with the applicable provisions of OAR 345, Division 27, in effect on the date of the  
14 Council action.

15  
16 **Legal Description**

- 17 (2) Before beginning construction of the energy facility, the Certificate Holder shall submit  
18 to the Office a legal description of the site, except as provided in OAR 345-027-0023(6).

19  
20 **General Requirements**

- 21 (3) The Certificate Holder shall design, construct, operate, and retire the facility:  
22  
23 (a) Substantially as described in the Site Certificate;  
24  
25 (b) In compliance with the requirements of ORS Chapter 469, applicable Council  
26 rules, and applicable state and local laws, rules and ordinances in effect at the  
27 time the Council issues the Site Certificate; and,  
28  
29 (c) In compliance with all applicable permit requirements of other state agencies.

30  
31 **Construction Rights on Site**

- 32 (4) Except as necessary for the initial survey or as otherwise allowed for transmission lines  
33 or pipelines in this condition, the Certificate Holder shall not begin construction, as  
34 defined in OAR 345-001-0010, or create a clearing on any part of the site until the  
35 Certificate Holder has construction rights on all parts of the site. For the purpose of this  
36 condition, "construction rights" means the legal right to engage in construction activities.  
37 For transmission lines or pipelines, if the Certificate Holder does not have construction  
38 rights on all parts of the site, the Certificate Holder may nevertheless begin construction  
39 or create a clearing on a part of the site if:  
40  
41 (a) The Certificate Holder has construction rights on that part of the site; and,  
42  
43 (b) The Certificate Holder would construct and operate part of the facility on that part  
44 of the site even if a change in the planned route of the transmission line or

1 pipeline occurs during the Certificate Holder's negotiations to acquire  
2 construction rights on another part of the site.  
3

4 **Beginning and Completing Construction.**

5 (5) The Certificate Holder shall begin construction of the energy facility by November 8,  
6 2004. Beginning construction of the Port Westward to BPA Allston Substation  
7 Transmission Line shall not satisfy this requirement.  
8

9 (a) The Certificate Holder shall report promptly to the Office the date that it began  
10 construction of the facility, as defined in OAR 345-001-0010. In reporting the  
11 beginning of construction, the Certificate Holder shall briefly describe all work on  
12 the site performed before beginning construction, including work performed  
13 before the Council issued the Site Certificate and work performed to construct the  
14 Port Westward to BPA Allston Substation Transmission Line, and shall state the  
15 cost of that work, pursuant to OAR 345-026-0048.  
16

17 (b) If the Certificate Holder begins construction of the Port Westward to BPA Allston  
18 Substation Transmission Line, as defined in OAR 345-001-0010, prior to  
19 beginning construction of the energy facility, it shall promptly report to the Office  
20 the date it began construction of the transmission line.  
21

22 (6) The Certificate Holder shall complete construction of the facility by May 8, 2007. The  
23 completion of construction date is the day by which (1) the facility is substantially  
24 complete as defined by the Certificate Holder's construction contract documents;  
25 (2) acceptance testing is satisfactorily completed; and, (3) the energy facility is ready to  
26 commence continuous operation consistent with the Site Certificate. Completion of  
27 construction of the Port Westward to BPA Allston Substation Transmission Line  
28 separately shall not satisfy this requirement.  
29

30 (a) The Certificate Holder shall report promptly to the Office the date it completed  
31 construction of the facility.  
32

33 (b) If the Certificate Holder completes construction of the Port Westward to BPA  
34 Allston Substation Transmission Line separately before completing construction  
35 of the facility, it shall promptly report that date to the Office.  
36

37 (c) Separate completion of construction of Port Westward to BPA Allston Substation  
38 Transmission Line shall be the date that PGE makes it available to the  
39 Summit/Westward Project to transmit energy.  
40

41 **F.2 OTHER CONDITIONS BY RULE**  
42

1 **Incident Reports**

- 2 (1) With respect to the related or supporting natural gas pipeline, the Certificate Holder shall  
3 submit to the Office copies of all incident reports required under 49 CFR §192.709 that  
4 involve the pipeline.  
5

6 **Rights-of-Way**

- 7 (2) Before beginning operation of the energy facility, the Certificate Holder shall submit to  
8 the Office a legal description of the permanent right-of-way where the Certificate Holder  
9 has built a pipeline or transmission line within an approved corridor. The site of the  
10 pipeline or transmission line subject to the Site Certificate is the area within the  
11 permanent right-of-way. However, if the Certificate Holder completes construction of  
12 the Port Westward to BPA Allston Substation Transmission Line before beginning  
13 construction of the energy facility, the Certificate Holder shall submit to the Office a  
14 legal description of the 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 impact  
19 attributable to the facility, the Certificate Holder shall, as soon as possible, submit a  
20 written report to the Office describing the impact on the facility and its ability to comply  
21 with any affected Site Certificate conditions.  
22

23 **Compliance Plans**

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

33 **Reporting**

- 34 (5) Within six months after beginning any construction, and every six months thereafter  
35 during construction of the energy facility and related or supporting facilities, the  
36 Certificate Holder shall submit a semi-annual construction progress report to the Council.  
37 In each construction progress report, the Certificate Holder shall describe any significant  
38 changes to major milestones for construction. When the reporting date coincides, the  
39 Certificate Holder may include the construction progress report within the annual report  
40 described in Condition F.2(6).  
41  
42 (6) The Certificate Holder shall, within 120 days after the end of each calendar year after  
43 beginning construction, submit an annual report to the Council that addresses the subjects  
44 listed in OAR 345-026-0080(2). The Council secretary and the Certificate Holder may,  
45 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 reports  
3 the Certificate Holder submits to other state, federal or local agencies, the Certificate  
4 Holder may submit excerpts from such other reports. The Council reserves the right to  
5 request full copies of such excerpted reports.  
6

7 **Schedule Modification**

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

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

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

22 **Notification of Incidents**

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

34 **G. GENERAL CONDITIONS**

- 35 (1) The general arrangement of the Port Westward Generating Project shall be substantially  
36 as shown in the ASC.  
37  
38 (2) The Certificate Holder shall ensure that related or supporting facilities are constructed in  
39 the corridors described in this Order and as shown in ASC and in the manner described in  
40 this Order and the ASC.  
41  
42 (3) During construction and operation of the energy facility, the Certificate Holder shall  
43 house the combustion turbine in an enclosure that provides thermal insulation, acoustical  
44 attenuation, and fire extinguishing media containment and that would allow access for  
45 routine inspection and maintenance.

1  
2 **Successors and Assigns**

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

8 **Severability and Construction**

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

16 **Governing Law and Forum**

17 (6) This Site Certificate shall be governed by the laws of the State of Oregon.

18  
19 (7) Any litigation or arbitration arising out of this agreement shall be conducted in an  
20 appropriate forum in Oregon.  
21

22 **IN WITNESS WHEREOF**, this Site Certificate has been executed by the State of Oregon,  
23 acting by and through its Energy Facility Siting Council, and the Portland General Electric  
24 Company.  
25

26 ENERGY FACILITY SITING COUNCIL  
27

28  
29 By: /s/ Roslyn Elms-Sutherland Date: November 8, 2002  
30 Dr. Roslyn Elms-Sutherland, Chair  
31

32 PORTLAND GENERAL ELECTRIC COMPANY  
33

34  
35 By: /s/ Ron W Johnson Date: November 12, 2002  
36 Ron W Johnson, vice president of Power Supply Engineering and Strategy  
37

38 ATTACHMENT A  
39 MEMORANDUM OF UNDERSTANDING: MONETARY PATH PAYMENT REQUIREMENT  
40

41 ATTACHMENT B  
42 WATER POLLUTION CONTROL FACILITIES PERMIT (B.1) AND ANALYSIS (B.2)  
43

44 ATTACHMENT C  
45 REMOVAL/FILL PERMIT

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**ATTACHMENT A**

**MEMORANDUM OF UNDERSTANDING:  
MONETARY PATH PAYMENT REQUIREMENT**



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**ATTACHMENT B**

**WATER POLLUTION CONTROL FACILITIES  
PERMIT (B.1)**

**AND**

**ANALYSIS (B.2)**



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**ATTACHMENT C**

**REMOVAL/FILL PERMIT**