ELEVENTH AMENDED

SITE CERTIFICATE

FOR THE

PORT WESTWARD GENERATING PROJECT

Issued By

OREGON ENERGY FACILITY SITING COUNCIL
550 CAPITOL STREET NE
SALEM, OR 97301

November 22, 2019

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A. INTRODUCTION

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

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, which by this reference are incorporated herein: (a) the Council's Final Order in the Matter of the Application for a Site Certificate for the Port Westward Generating Project, which the Council granted on November 8, 2002; (b) the Council's Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. One, which the Council granted on December 5, 2003; (c) the Council's Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. Two, which the Council granted on September 24, 2004; (d) the Council's Final Order in the Matter of the Site Certificate for the Port Westward Generating Project Request for Amendment No. Three, which the Council granted on January 28, 2005; (e) the Council's Final Order in the Matter of the Fourth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on May 19, 2006; (f) the Council's Final Order in the Matter of the Fifth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on September 29, 2006; (g) the Council's Final Order in the Matter of the Sixth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 27,2009; (h) the Council's Final Order in the Matter of the Seventh Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 12, 2010; (i) the Council's Final Order in the Matter of the Eighth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on August 19, 2011; (j) the Council's Final Order in the Matter of the Ninth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on March 15, 2013; (k) the Council's Final Order in the Matter of the Tenth Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on August 23, 2013; and (l) the Council's Final Order in the Matter of the Eleventh Request to Amend the Site Certificate for the Port Westward Generating Project, which the Council granted on November 22, 2019 [Amendments No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, & 11.] Collectively, we refer to the Final Orders listed in (a) through (l) as "the Orders."

In interpreting this site certificate, any ambiguity shall be clarified by reference to, and in the following priority: this Site Certificate, the record of the proceedings that led to the Orders, and the Application for a Site Certificate for the Port Westward Generating Project. As used in this Site Certificate, the "application for site certificate" or the "ASC" includes: (a) the Application for a Site Certificate for the Port Westward Generating Project, which the Certificate Holder filed on April 11, 2002; (b) the Certificate Holder's Request for First Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on October 25, 2003; (c) the Certificate Holder's Request for Second Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on May 7, 2004; (d) the Certificate Holder's Request for Third Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on November 3, 2004; (e) the Certificate Holder's Request for Fourth Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on January 18, 2006; (f) the Certificate Holder's Request for Fifth Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on July 18, 2006; (g) the Certificate Holder's Request for Sixth Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on November 7,2008; (h) the Certificate Holder's Request for Seventh Amendment to the Site Certificate for the Port Westward Generating Project, which the Council received on September 18, 2009; (i) the Certificate Holder's Request for the Eighth Amendment to the Site Certificate for Port Westward Generating Project, which the Council received on November 4, 2010; (j) the Certificate Holder's Request for the Ninth Amendment to the Site Certificate for Port Westward Generating Project, which the Council received on October 30, 2012; (k) the Certificate Holder's Request for the Tenth Amendment to the Site Certificate for Port Westward Generating Project, which the Council received on May 28, 2013; and (l) the Certificate Holder's Request for the Eleventh Amendment to the Site Certificate for Port Westward Generating Project, which the Council received on July 12, 2019. [Amendments 1 through 11]

The terms used in this Site Certificate shall have the same meaning set forth in ORS 469.300, 469.503(2)(e) and 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 power plant, 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). [Amendment 11]

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 Orders. 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). [Amendment 11]

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

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

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

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

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

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

10. The Certificate Holder may develop the energy facility in two phases. Phase 1 would consist of the southernmost generating unit ("Unit 1"), including one combustion turbine generator, heat recovery steam generator, steam generator, one step-up transformer bank, auxiliary transformer, and cooling tower. Phase 1 would also include all energy facility components and

related or supporting facilities common to the two units. Phase 2 would consist of the northernmost generating unit ("Unit 2") and its associated facilities. All conditions of this Site Certificate apply equally to Phase 1 and Phase 2, unless a condition specifies different obligations for Phase 1 or Phase 2. [Amendments No. 1, 3 & 11]

C. SITE DESCRIPTIONS

C.1. FACILITY

C.1.a. Major Structures and Equipment

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Fuel Use. The energy facility will use natural gas as the only fuel to power the turbines, the reciprocating engines, and the power augmentation technologies. It will use up to approximately 4,700 MMBtu per hour of natural gas at full load with the duct burners in operation at the average annual site condition. [Amendments No. 1, 3, 7 & 11]

Water Use. The energy facility will obtain water to generate steam and to cool the steam process from an existing PGE intake structure on the Bradbury Slough of the Columbia River. For Unit 1, the Certificate Holder obtained a permanent transfer of 5.4 cfs of a water right associated with PGE's Trojan Nuclear Plant, Certificate No. 81969. For Unit 2, PGE will obtain a

permanent transfer of an additional 3.0 cfs under the same water right.[1] [Amendments No. 1, 3 & 7]

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

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

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

The Certificate Holder will discharge sanitary sewage to an engineered septic tank and drain field at a rate of about 500 gallons per day, under the oversight of Columbia County. The Certificate Holder will route storm water from roofs and paved areas to pervious areas to percolate into the shallow groundwater. [Amendment No. 11]

C.1.b. Related or Supporting Facilities

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

Natural Gas Pipelines. Natural gas will fuel the combustion turbine generators, reciprocating engines, and duct burners. The energy facility will be served by the Kelso-Beaver Pipeline, an existing FERC-regulated interstate pipeline with a current capacity of 200,913 decatherms per day. PGE owns the pipeline jointly with two other parties. To create the additional capacity that will be required to serve the energy facility, PGE will add 1,000 to 7,000 compressor horsepower to the Port Westward site and/or up to 8,000 compressor horsepower to the Kelso-Beaver Pipeline. All work on the existing pipeline will be subject to FERC approval. The addition of compressor horsepower is intended to ensure 300 to 1000 psig gas pressure at the

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

Port Westward Industrial Area with total capacity of 310 million standard cubic feet/day. [Amendments No. 1, 7 & 11]

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

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

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

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

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

Battery Energy Storage System (BESS). The certificate holder will construct up to 6 MW of battery energy storage as a related or supporting facility to Unit 2. The BESS will be factory built with batteries, enclosures, power conversion systems (inverters), an interconnection system, and step-up transformers. The point of interconnect for the BESS will be the switchgear in the existing switchyard. [Amendment No. 11]

Utility Lines Between the Energy Facility Site and the PGE Beaver Generating Plant. The Certificate Holder will construct water, backup electricity and communications lines between the existing PGE Beaver Generating Plant and the energy facility. The Certificate Holder will install the lines below ground within existing roadways. Potable water may be conveyed to the

energy facility in a pipeline from the potable water storage tank located in the vicinity of the PGE water intake facility that currently serves the PGE Beaver Generating Plant. The potable water pipeline will be about two inches in diameter. The Certificate Holder will install the potable water line underground. The potable water line will join the energy facility's water supply pipeline corridor at their intersection as shown on revised Figure B-2. [Amendment No. 1]

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

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

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

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

Electric Transmission Line. The energy facility will deliver electric power to the regional grid by means of a new transmission line consisting of one 230 kV circuit on monopole towers (up to 120 feet high) routed along existing power line easements. There were two transmission line

alternatives routes under consideration, with two other short alternative segments in the vicinity of the BPA Allston Substation:

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

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

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

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

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

C.2. LOCATION OF THE FACILITY

C.2.a. The Energy Facility Site

The energy facility will be located about seven miles by road northeast of the city of Clatskanie in Columbia County, Oregon. The energy facility site will be located on an approximately 852-acre parcel leased to PGE by the Port of Columbia County in Section 15, Township 8 North, Range 4 West, Willamette Meridian. The energy facility site will be fenced and will comprise about 26 acres of the larger parcel [Amendments No. 1, 2, 7 & 11]

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

C.2.b. Related or Supporting Facility Sites

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

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

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

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

Wastewater Pipeline Corridor. Water discharged from the energy facility will be returned to the Columbia River about one-half mile northwest of the energy facility. The wastewater pipeline corridor will be about 100 feet wide and 2,400 feet long, will cover an area of about 6 acres, and will lie primarily within the 852-acre parcel leased to PGE by the Port of St. Columbia County and situated within Section 15 and 16, Township 8 North, Range 4 West, Willamette Meridian. [Amendments No. 1 & 11]

Battery Energy Storage System

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

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

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

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

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

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

Alternative Two. Under this alternative, the energy facility will deliver electric power to Trojan near Goble, Oregon, by means of a new 230-kV circuit on monopole steel structures. Between PWGP and the BPA Allston Substation, the new transmission line will be routed on an existing PGE right-of-way 250 feet wide as described in Alternative One. The structures will be placed on or near the centerline of the unused north half of the right-of-way. Between the BPA Allston Substation and Trojan, the new transmission line will run parallel to an existing BPA

transmission line. This section of the transmission line corridor will be about 125 feet wide and ten miles long, will occupy an area of about 300 acres, and will pass through Sections 10, 11, 15, 14, 23 and 24, Township 7 North, Range 3 West, and Sections 19, 30, 29, 28, 33 and 34, Township 7 North, Range 2 West, and Sections 3 and 2, Township 6 North, Range 2 West, Willamette Meridian.

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

D. COUNCIL SITING STANDARDS

D.1. [PLACEHOLDER]

[No Conditions]

D.2. ORGANIZATIONAL EXPERTISE

(1) The Certificate Holder shall report to the Department of Energy ("Department") in a timely manner any change in the ownership of Portland General Electric Company ("PGE").

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

(3) If the Certificate Holder chooses a third-party contractor to operate the facility, the Certificate Holder shall submit to the Council the identity of the contractor so the Council may review the qualifications and capability of the contractor to meet the standards of OAR 345-0022-0010. If the Council finds that a new contractor meets these standards, the Council shall not require an amendment to the Site Certificate for the Certificate Holder to hire the contractor.

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

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

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

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

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

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

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

D.3. RETIREMENT AND FINANCIAL ASSURANCE

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

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

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

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

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

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

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

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

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

(b) Before beginning construction of Unit 2, the Certificate Holder shall submit a bond or letter of credit in an amount equal to the sum of (i) $5,201,000 (in 1st Quarter 2010 dollars) for Unit 1, plus (ii) an amount for Unit 2 determined by application of the Department's Facility Retirement Cost and Estimating Guide[2] subject to review and approval by the Department. [Amendments No. 3 & 7]

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

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

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

(f) The present value of dollar amounts in this site certificate shall be calculated using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue

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

Forecast," or by any successor agency (the "Index")[3]. If at any time the Index is no longer published, the Council shall select a comparable calculation. [Amendments No. 3, 6, 7, & 11]

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

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

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

(7) Before beginning construction of the energy facility or BESS, the Certificate Holder shall prepare and submit to the Department a materials management and monitoring plan that addresses the handling and transportation of hazardous substances, the measures it will implement to prevent site contamination, and how it will document implementation of the plan during construction. The materials management and monitoring plan shall be subject to approval by the Department. For the purpose of this condition and Conditions D.3(8), D.3(10), D.3(11), and D.3(12) below, the terms "release" and "hazardous substances" shall have the meanings set forth at ORS 465.200. [Amendment No. 11]

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

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

(10) In the event that any Phase I Environmental Site Assessment identifies improper handling or storage of hazardous substances or improper record keeping procedures, the Certificate Holder shall correct such deficiencies within six months after completion of the corresponding Phase I Environmental Site Assessment. It shall promptly report its corrective

[3] DAS maintains the Index and places it on line at https://www.oregon.gov/das/OEA/Documents/other-quarterly.xls

actions to the Department. The Council shall determine whether the corrective actions are sufficient.

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

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

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

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

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

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

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

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

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

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

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

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

(17) Before beginning construction of the BESS, authorized by the Eleventh Amended site certificate, the certificate holder shall provide updated design information including, but not limited to, battery chemistry and the number and layout of modular containers, inverters, and transformers for the BESS. [Amendment No. 11]

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

D.4. LAND USE

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

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

plan to Columbia County to reflect the addition of the BESS as a related or supporting facility. [Amendment No. 11]

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

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

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

D.5. STRUCTURAL STANDARD

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

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

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

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

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

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

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

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

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

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

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

(9) The secondary gas supply pipeline constructed and operated by NWN shall be designed to accommodate the potential for different settlement and seismic induced

differential deformation, particularly where the pipeline connects to the existing supply line.

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

D.6. SOIL PROTECTION

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

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

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

(b) Remove vegetation only as necessary.

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

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

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

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

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

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

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

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

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

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

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

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

D.7. PROTECTED AREAS

[No Conditions]

D.8. FISH AND WILDLIFE HABITAT

(1) The Certificate Holder shall, to the extent practicable, avoid and, where avoidance is not possible, minimize construction and operation disturbance to areas of native vegetation and areas that provide important wildlife habitat. With respect to

construction of the facility, the Certificate Holder shall mitigate possible impacts to wildlife by measures including, but not limited to, the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(8) As possible and practicable, the Certificate Holder shall conduct site preparation for construction of the PW2 facility, or the BESS, in a manner that minimizes potential for impacting nesting native birds protected by the Migratory Bird Treaty Act (MBTA), such as conducting initial site clearing outside of the breeding season for most birds (generally March-July). Prior to commencement of construction activity during the breeding season, a qualified biologist will conduct a walk-down of the construction site

to determine the presence of any active bird nests and to rescue and relocate any nongame protected wildlife (OAR 635-045-0002) that may be encountered according to the methods provided by ODFW. Surveys will be conducted by a qualified wildlife biologist and will include complete coverage of all areas to be disturbed using systematic transects spaced a maximum of 5 meters apart. As applicable considering construction schedule, PGE will also conduct a survey beginning in March prior to construction to detect any streaked horned larks that could be using the very limited amount of potential breeding habitat on site. PGE's survey protocol methods will be coordinated with ODFW. Construction personnel will be trained regarding avian awareness issues and reporting of bird nests and dead birds found at the construction site (also see Condition D.8(1) for wildlife awareness requirements). The Certificate Holder will consult with USFWS and ODFW regarding any active bird nests found within the construction disturbance area. [Amendments No. 7, 9 & 11]

(9) The Certificate Holder shall schedule construction at the existing raw water intake pump station to avoid the purple martin nesting season (April 1 through June 30). Before beginning construction at the existing raw water intake pump station, the Certificate Holder shall conduct a survey to determine the exact location of any purple martin nests. Should the Certificate Holder cause unavoidable impacts to occur to any purple martin nest, it shall construct, install and maintain an artificial nest site at a nearby location. It shall pick an appropriate location in consultation with ODFW and the Department.

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

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

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

(13) To mitigate for impacts to 19 acres of non-native grassland, the Certificate Holder shall protect 19 acres of on-site emergent wetland habitat identified in the ASC by execution of a conservation easement for the life of the energy facility. Before beginning

construction of Phase 1 of the energy facility, the Certificate Holder shall provide a copy of the conservation easement or similar conveyance to the Department. [Amendment No. 1]

(14) The Certificate Holder shall restore temporary upland and wetland disturbance areas by returning the areas to their original grade and seeding, with appropriate seed mixes as recommended by ODFW and as described in the Revegetation and Noxious Weed Control Plan included as Attachment D to the Final Order on Request for Amendment 11. [Amendments No. 7 & 11]

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

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

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

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

(19)[Deleted]. [Amendment No. 11]

(20)[Deleted]. [Amendments No. 3, 10 & 11]

(21)[Deleted]. [Amendment No. 11]

(22)[Deleted]. [Amendments No. 1 & 11]

(23)[Deleted]. [Amendment No. 11]

(24)[Deleted]. [Amendment No. 11]

(25) To mitigate for impacts to 8.5 acres of non-native grassland, the Certificate Holder shall protect and enhance at least 8.5 acres of on-site emergent wetland habitat

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

(26)[Deleted] [Amendments No. 10 & 11]

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

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

D.9. THREATENED AND ENDANGERED SPECIES

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

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

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

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

(5) Before beginning construction of the transmission line, the Certificate Holder shall employ measures to protect raptors in the design and construction of transmission lines. It shall design all energized transmission conductors with either a minimum separation of nine feet or other measures to reduce the potential for electrocution of raptors or other birds.

(6) The Certificate Holder shall not conduct construction activities at the transmission line terminus at the Trojan Nuclear Plant that generate extreme noise or high levels of visual disturbance during the peregrine falcon critical nesting period from January 1 to June 30. Such activities include pile driving, excavation, and grading for ground stabilization purposes and site preparation. Construction activities involving lower levels of visible activity and less noise are allowed throughout the year. These include such activities as excavating and setting forms, pouring footings, erecting power line towers and bus duct, hanging conductor wires, installing control wires, and testing.

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

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

(c) The Certificate Holder shall not proceed with construction activity at the transmission line terminus at the Trojan Nuclear Plant during the peregrine falcon critical nesting period from January 1 to June 30 to the extent that ODFW or the

Department determines that the activity is not consistent with the limitations of this condition. [Amendment No. 3]

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

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

(9)[Deleted]. [Amendments No. 3 & 11]

D.10. SCENIC AND AESTHETIC VALUES

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

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

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

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

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

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

(7) After completion of construction of related and supporting pipelines in an area, the Certificate Holder shall re-vegetate any undeveloped areas disturbed by construction

activities using native species, including grasses, shrubs, and trees. If necessary, the Certificate Holder shall water re-vegetated areas on a regular basis until the plant species have been successfully established.

D.11. HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES

(1) Before beginning construction of the Port Westward to BPA Allston Substation Transmission Line or the BPA Allston Substation to Trojan Transmission Line, the Certificate Holder shall complete an archaeological survey of the approved transmission line corridors in consultation with the Oregon Historic Preservation Office ("SHPO"), the Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indian of Oregon, the Chinook Tribe in Washington, and appropriate federal agencies. The Certificate Holder shall ensure that a qualified archaeologist evaluates all cultural resources identified during the cultural resources survey. The Certificate Holder shall report to SHPO and the Department about whether its archaeologist recommends that a discovery is significant or not significant. If SHPO determines that a discovery is significant, the Certificate Holder shall make recommendations to the Council for mitigation in consultation with SHPO, the Department, the tribes, and other appropriate parties. Mitigation measures shall include avoidance or data recovery. [Amendments No. 1 & 11]

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

(3) During construction of the facility, in the event any artifacts or other cultural materials are identified, the Certificate Holder shall cease all ground-disturbing activities until a qualified archaeologist can evaluate the significance of the find. The Certificate Holder shall report to SHPO and the Department about whether its archaeologist recommends the artifacts or cultural materials are significant or not significant. If SHPO determines that the materials are significant, the Certificate Holder shall make recommendations to the Council for mitigation in consultation with SHPO, the Department, the tribes, and other appropriate parties. Mitigation measures shall include avoidance or data recovery. The Certificate Holder shall not restart work in the affected area until it has demonstrated to the Department that it has complied with the archaeological permit requirements administered by SHPO. [Amendment No. 1]

(4) The Certificate Holder shall allow monitoring by the Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indian of Oregon, and the Chinook Tribe in Washington of earth-moving activities within any areas with a potential for containing archaeological remains. [Amendment No. 11]

(5) Before beginning construction of the facility or of the Port Westward to BPA Allston Substation Transmission Line separately, the Certificate Holder shall notify the Confederated Tribes of the Warm Springs Indian Reservation of Oregon, the Confederated Tribes of the Grand Ronde Community of Oregon, the Confederated Tribes of the Siletz Indians of Oregon, and the Chinook Tribe in Washington and provide their representatives the opportunity to be available for periodic on-site monitoring during construction activities. If the Certificate Holder constructs the energy facility in phases, the Certificate Holder shall notify the Tribes prior to construction of each phase. [Amendments No. 1 & 11]

(6) If construction activities for the secondary gas pipeline occur at a level below the sandy dredge fill (a depth of 10 feet), then the Site Certificate Holder or NW Natural shall immediately contact the State Historic Preservation Officer. [Amendment 5]

D.12. RECREATION

[No Conditions]

D.13. PUBLIC SERVICES

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

(2) Prior to applying for construction permits for the second power generation unit, the Certificate Holder shall enter into an Amended Traffic Improvement Agreement and pay a new Traffic Improvement Contribution to Columbia County according to the Amended Traffic Improvement Agreement and consistent with a Traffic Impact Analysis Study for the second power generation unit performed according to parameters agreed to by Columbia County and the Certificate Holder. [Amendment No. 8]

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

(4) Before beginning construction of the energy facility, the Certificate Holder shall coordinate with Columbia County the improvement and maintenance of signage and striping at the mainline rail crossing on Kallunki Road, including the installation of "DO NOT STOP ON TRACKS" signs.

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

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

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

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

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

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

(11) Prior to start of construction of Unit 2 of the energy facility, the certificate holder shall obtain from the Water Resources Department (WRD) a permanent water right transfer subject to the following conditions:

(a) The right to the use of the water is restricted to beneficial use at the place of use described in transfer application T-10955, and is subject to all other conditions and limitations contained in Certificate 81969 and any related decree.

(b) The quantity of water diverted at the new point of diversion, shall not exceed the quantity of water (3.0 cfs) lawfully available at the original point of diversion.

(c) WRD may require the water user to install a headgate, a totalizing flow meter, or other suitable measuring devices at the point of diversion. If WRD notifies the water user to install a headgate, a totalizing flow meter, or other measuring devices, the water user shall install such devices specified by WRD within the period allowed in the notice. Once installed, the water user shall maintain the meters or measuring devices in good working order and shall allow the Watermaster access to the meters or measuring devices.

(d) The water user shall maintain and operate a fish screening and/or by-pass device, as appropriate, at the point of diversion consistent with the Oregon Department of Fish and Wildlife's operational and maintenance standards.

(e) The approved changes shall be completed and full beneficial use of the water shall be made on or before October 1, 2015. A Claim of Beneficial Use prepared by a Certified Water Rights Examiner shall be submitted by the Certificate Holder to the Department within one year after the deadline for completion of the changes and full beneficial use of the water.

(f) Prior to issuance of the permanent transfer, the certificate holder shall provide to ODOE and WRD a report of land ownership for the lands to which the water right is appurtenant (the FROM lands). The report must be prepared by a title company. The title company's report must either be: 1) prepared within three months of the Energy Facility Siting Council's Final Order on PWGP Amendment 7, or 2) reflect ownership information within three months of the recording of any water right conveyance agreements for the property in the county deed records. The ownership report shall include:

(A) Date reflected by the ownership information

(B) List of owners at that time

(C) Legal description of the property to which the water right involved in the transfer is currently appurtenant, and

(D) A notarized statement of consent from any landowner listed in the ownership report who is not already included in the transfer application, or other information such as a water right conveyance agreement, if applicable. [Amendments No. 7 & 9]

(12) Before beginning operation of the BESS, the certificate holder will provide Emergency Response Plans for the facility, updated with response procedures specific to the BESS, to the Clatskanie Rural Fire Department, the St. Helens Fire District, and the Department. [Amendment No. 11]

D.14. WASTE MINIMIZATION, OAR 345-022-0120

(1) During construction, operation and retirement of the energy facility, the Certificate Holder shall separate recyclable materials from the solid waste stream to the extent practicable, store those materials on site until sufficient quantities exist to make recycling economic, and periodically deliver or sell those materials to a recycling facility.

(2) During construction, operation and retirement of the energy facility, the Certificate Holder shall segregate all used oil; mercury-containing lights; and lead-acid, lithium-ion, and nickel-cadmium batteries. The Certificate Holder shall store such materials on site, and deliver such materials to a recycling firm specializing in the proper disposal of such materials. [Amendment No. 11]

(3) Upon completion of construction, the Certificate Holder shall dispose of all temporary structures not required for facility operation and all timber, brush, refuse, and flammable or combustible material resulting from clearing of land and construction of the facility.

(4) During operation of the energy facility, the Certificate Holder shall convey all storm water and water discharges other than sanitary sewage to pervious areas to allow for percolation into the shallow groundwater.

(5) During operation of the energy facility, the Certificate Holder shall use internal recycling of aqueous streams whereby water shall be recycled several times in the cooling system before being discharged.

D.15. CARBON DIOXIDE STANDARD

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

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

(b) The form of the Memorandum of Understanding “MOU”) between the Certificate Holder and the Climate Trust establishing the disbursement mechanism to transfer

selection and contracting funds and offset funds to The Climate Trust shall be substantially in the form of Attachment A to this Site Certificate.

(c) Either the Certificate Holder or The Climate Trust may submit to the Council for the Council's resolution any dispute between the Certificate Holder and The Climate Trust that concerns the terms of the bond, letter of credit, or MOU concerning the disbursement mechanism for the monetary path payments, or any other issues related to the monetary path payment requirement. The Council's decision shall be binding on all parties.

(d) The bond or letter of credit shall remain in effect until such time as the Certificate Holder has disbursed the full amount of the monetary path payment requirement to The Climate Trust. The Certificate Holder may reduce the amount of the bond or letter of credit commensurate with payments it makes to The Climate Trust. The bond or letter of credit shall not be subject to revocation before disbursement of the full monetary path payment requirement.

(e) In the event that the Council approves a new Certificate Holder for the energy facility:

(A) The new Certificate Holder shall submit to the Council for the Council's approval the form of a bond or letter of credit that provides comparable security to the bond or letter of credit of the current Certificate Holder. The Council's approval of a new bond or letter of credit shall not require a site certificate amendment.

(B) The new Certificate Holder shall submit to the Council for the Council's approval the form of an MOU between the new Certificate Holder and The Climate Trust that is substantially in the form of Attachment A to this Site Certificate. In the case of a dispute between the new Certificate Holder and The Climate Trust concerning the disbursement mechanism for monetary path payments or any other issues related to the monetary path payment requirement, either party may submit the dispute to the Council for the Council's resolution as provided in Condition D.15(1)(c). Council approval of a new MOU shall not require a site certificate amendment.

(f) If calculations pursuant to Condition D.15(5) demonstrate that the Certificate Holder must increase its monetary path payments, the Certificate Holder shall increase the bond or letter of credit sufficiently to meet the adjusted monetary path payment requirement within the time required by Condition D.15(3)(c). Alternately, the Certificate Holder may disburse any additional required funds directly to The Climate Trust within the time required by Condition D.15(3)(c).

(g) The amount of the bond or letter of credit shall increase annually by the percentage increase in the Index, and the disbursement of funds shall be pro-rated within the year

to the date of disbursement to The Climate Trust from the calendar quarter of Council approval of the Site Certificate.

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

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

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

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

(3) The Certificate Holder shall submit all monetary path payment requirement calculations to the Department for verification in a timely manner before submitting a bond or letter of credit for Council approval and before entering into an MOU with The Climate Trust. The Certificate Holder shall use the contracted design parameters for capacities and heat rates that it reports pursuant to Condition D.15(4) to calculate the estimated monetary path payment requirement, along with the estimated annual hours of operation of power augmentation technologies and of non-base load power plants for Unit 2. The Certificate Holder shall use the Year One Capacities and Year One Heat Rates that it reports for the facility pursuant to Condition D.15(5) to calculate whether it owes additional monetary path payments**.** [Amendment No. 7]

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

(b) The net carbon dioxide emissions rate for Unit 2, and for incremental emissions of Unit 1 operating with power augmentation technologies that increase the capacity and

heat rate of the facility above the capacity and heat rate that it can achieve as a base load gas plant on a new and clean basis ("power augmentation technologies") shall not exceed 0.675 pounds of carbon dioxide per kilowatt-hour of net electric power output, with carbon dioxide emissions and net electric power output measured on a new and clean basis, as the Department may modify such basis pursuant to Condition D.15(4)(d) and (g). [Amendment No. 7]

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

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

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

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

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

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

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

(d) Upon a timely request by the Certificate Holder, the Department may approve modified parameters for testing the power augmentation technologies on a new and

clean basis, pursuant to OAR 345-024-0590(1). The Department's approval of modified testing parameters for power augmentation technologies shall not require a site certificate amendment.

(e) Before beginning construction of Unit 2, the Certificate Holder shall notify the Council in writing of its final selection of the quantities and vendors for reciprocating engines and combustion turbine generators and shall submit written design information to the Council sufficient to verify the non-base load power plant's designed new and clean heat rate (higher heating value) and its net power output at the average annual site condition. [Amendment No. 7]

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

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

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

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

(b) Year One Test-2 shall determine the actual heat rate ("Year One Heat Rate-2") and net electric power output ("Year One Capacity-2") for the facility operating with power augmentation technologies, without degradation, with the results adjusted for the average annual site condition for temperature, barometric pressure and relative humidity, and using a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel pursuant to OAR 345-001-0010(35). The full power test shall be 100 hours duration

unless the Department has approved a different duration pursuant to Condition (4)(d**)** or (4)(g). [Amendment No. 7]

(c) The Certificate Holder shall notify the Department at least 60 days before conducting the tests required in subsections (a) and (b) unless a shorter time is mutually agreed upon.

(d) Before conducting the tests required in subsections (a) and (b), the Certificate Holder shall, in a timely manner, provide to the Department a copy of the protocol for conducting the tests.

(e) Within two months after completing the Year One Tests, the Certificate Holder shall provide to the Council a report of the results of the Year One Tests.

(f) If the certificate holder elects to report all carbon dioxide emissions based on direct measurements pursuant to OAR 345-024-0590(5)(b), then the Year One Test for Unit 2 is not required. However, if the Year One test is not performed, then the certificate holder must continue to report carbon dioxide emissions using actual measured emissions as reported to the Department of Environmental Quality or the U.S. Environmental Protection Agency for all subsequent five year periods over the life of Unit 2, and may not change its election to report based on new and clean heat rate in any subsequent five year period. [Amendment No. 7]

(g) If the Year One test is not performed for Unit 2 pursuant to subsection (f) of this condition, then the certificate holder shall report its net kWh generation and actual measured carbon dioxide emissions for the 12 month period following start of commercial operation of Unit 2. The certificate holder shall report the net kWh generation and actual carbon dioxide emissions for this period to the Department within two months of the end of the first 12 month period. The certificate holder shall use the net kWh generation and measured carbon dioxide emissions to perform the calculations to determine if supplemental monetary path payments are needed as set forth in Condition D.15(6). The certificate holder shall submit these calculations to the Department for verification as set forth in Condition D.15(7). [Amendment No. 7]

(6) If calculations pursuant to Condition D.15(7) demonstrate that the Certificate Holder must supplement its monetary path payments ("supplemental monetary path payment requirement"), the Certificate Holder shall provide a bond or letter of credit sufficient to meet the supplemental monetary path payment requirement within the time required by Condition D.15(7)(b). The bond or letter of credit shall not be subject to revocation before disbursement of the supplemental monetary path payment requirement. Alternately, the Certificate Holder may disburse in cash any such supplemental monetary path payments directly to The Climate Trust within the time required by Condition D.15(7). [Amendment No. 7]

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

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

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

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

(B) The Department shall calculate estimated future excess emissions and notify the Certificate Holder of the amount of payment required, using the monetary path, to offset them. To estimate excess emissions for the remaining period of the deemed 30-year life of the facility, the Department shall use the parameters specified in OAR 345-024-0600(4)(b). The Certificate Holder shall pay for the estimated excess emissions at $ 0.85 per ton of carbon dioxide (in 2002 dollars). The Department shall notify the Certificate Holder of the amount of payment required, using the monetary path, to offset future excess emissions. [Amendments No. 6 & 7]

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

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

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

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

(e) If the Department determines that Unit 2 exceeds the projected net total carbon dioxide emissions calculated pursuant to Conditions D.15(4) and D.15(5), prorated for five years, during any Unit 2 five-year reporting period described in subsection (d), the Certificate Holder shall offset excess emissions for the specific reporting period according to subsection (A) and shall offset the estimated future excess emissions according to subsection (B), pursuant to OAR 345-024-0600(4). The Certificate Holder shall offset excess emissions using the monetary path as described in OAR 345-024-0710, except that contracting and selecting funds shall equal twenty (20) percent of the value of any offset funds up to the first $250,000 (in 1st quarter 2010 dollars) and 4.286 percent of the value of any offset funds in excess of $250,000 (in 1st quarter 2010 dollars). The Certificate Holder shall disburse the funds to The Climate Trust within 30 days after notification by the Department of the amount that the Certificate Holder owes. [Amendment No. 7]

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

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

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

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

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

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

(10) Notwithstanding Conditions D.15(1) through d.15(9), if the Certificate Holder begins construction of the Port Westward to BPA Allston Substation Transmission Line, but no other part of the energy facility or other related or supporting facilities, the Certificate

Holder shall not be required to comply with Conditions D.15(1) through D.15(9). The Certificate Holder shall comply with Conditions D.15(1) through D.15(9) in connection with construction of any part of the energy facility or related or supporting facilities other than the Port Westward to BPA Allston Substation Transmission Line.

(11) If the Certificate Holder begins construction of Phase 1, but not Phase 2, the Certificate Holder shall comply with Conditions D.15(1) through D.15(9) for Phase 1. If the Certificate Holder later begins construction of Phase 2, the Certificate Holder shall comply with Conditions D.15(1) through D.15(9) for Phase 2. [Amendment No. 1]

E. OTHER APPLICABLE REGULATORY REQUIREMENTS

E.1. REQUIREMENTS UNDER COUNCIL JURISDICTION

E.1.a. Noise

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

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

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

(4) Within six months after the start of commercial operation of the energy facility, the Certificate Holder shall retain a qualified noise specialist to measure noise levels associated with the energy facility operation when environmental conditions are expected to result in maximum sound propagation between the source and the receivers and when the energy facility is operating in a typical operations mode that produces maximum noise levels.

(a) The specialist shall measure noise levels at sites (1), (2), (5) and (6), as described in Exhibit X of the ASC, to determine if actual noise levels are within the levels specified in the applicable noise regulations in OAR 345-035-0035(1)(b)(B)(i).

(b) The Certificate Holder shall report the results of the noise evaluation to the Department.

(c) If actual noise levels do not comply with applicable DEQ regulations, the Certificate Holder shall take those actions necessary to comply with the regulations as soon as practicable.

(d) If initial measurements show that actual noise levels at site (5) by 7 dBA or more, the Certificate Holder shall measure the noise levels as specified in this condition and shall repeat the process outlined in subsections (a), (b), and (c) for site (5) within six months after completion of the initial measurements.

(5) The Certificate Holder shall install silencers on short duration noise sources (e.g. steam vents) from the heat recovery steam generator.

(6) The certificate holder shall confirm the PW1 noise level estimate at receiver 7 prior to the final design of PW2 and propose mitigation measures as necessary to ensure that the total PWGP noise levels do not exceed the limits specified in Table N-2 of the Final Order on Port Westward Amendment 7. [Amendment No. 7]

(7) Within six months after the start of commercial operation of PW2, the Certificate Holder shall retain a qualified noise specialist to measure noise levels associated with the PWGP energy facility operation (the operation of PW1 and PW2) during late night hours when environmental conditions are expected to result in maximum sound propagation between the source and each receiver and when the entire energy facility is operating in a typical operations mode that produces maximum noise levels.

(a) The specialist shall measure noise levels at sites (1), (2), (5),(6), and (7), to determine if actual noise levels generated by the PWGP are within the levels shown on Table N-2 of the Final Order on Amendment 7. The noise levels at sites 1 and 2 shall be measured when the wind is either calm or out of a northerly direction but blowing no more than 10 mph. The noise levels at sites 5, 6 and 7 shall be measured when the wind is either calm or out of a southerly direction but blowing no more than 10 mph.

(b) The Certificate Holder shall report the results of the noise evaluation to the Department.

(c) If actual noise levels do not comply with applicable DEQ regulations, the Certificate Holder shall take those actions necessary to comply with the regulations as soon as practicable.

(d) If initial measurements at site (5) show that the hourly L_{50} noise level is 48 dBA or more with the Beaver Plant in operation or 47 dBA or more without the Beaver Plant in operation, the Certificate Holder shall repeat the process outlined in subsections (a), (b), and (c) at site (5) and (7) within six months after completion of the initial measurements. [Amendment No. 7]

(7) To address the concern that noise from any other noise source not associated with the PWGP or Beaver Plant have contributed to the results of the compliance noise

measurements, the Certificate Holder may measure noise levels to determine if the operation of any other source has contributed to the compliance results. The Certificate Holder shall report the results of the noise evaluation to the Department indicating any adjustments to applicable noise limits consistent with OAR 340-035-0035(1)(b)(B)(i). [Amendment No. 7]

E.1.b. Wetlands and Removal/Fill Permit

(1) Before beginning construction of Phase 1 of the energy facility or the Port Westward to BPA Allston Substation Transmission Line, as appropriate, the Certificate Holder shall obtain a U.S. Army Corps of Engineers and Oregon Division of State Lands Joint Removal/Fill Permit substantially in the form of the Removal/Fill Permit in Attachment C; provided, that mitigation required under the Removal/Fill Permit shall allow for accommodation of Corps of Engineers mitigation requirements, subject to the concurrence of the Department, in consultation with the Division of State Lands and affected federal agencies. [Amendment No. 1]

(2) The Certificate Holder shall comply with state laws and rules applicable to the Removal/Fill Permit that are adopted in the future to the extent that such compliance is required under the respective statutes and rules.

(3) The Certificate Holder shall clearly stake the wetland boundary adjacent to the spoils disposal area and the wetland number 4 boundary adjacent to the construction laydown/staging areas in the vicinity of the energy facility and the wetland boundary adjacent to the Beaver Generating Plant laydown/staging area prior to any ground disturbing activity in corresponding areas, and shall maintain the staking until all ground-disturbing activities in the corresponding areas have been completed. The Certificate Holder shall instruct all contractors disposing of soil in the spoils disposal area and using the construction laydown/staging areas in the vicinity of the energy facility or at the Beaver Generating Plant laydown/staging area about the purpose of the staking and shall require them to avoid any impact to the wetlands. [Amendments No. 3 & 10]

E.1.c. Public Health and Safety

(1) If local public safety authorities notify the Certificate Holder and the Department that the operation of the energy facility is contributing significantly to ground level fogging or icing along public roads and is likely to pose a significant threat to public safety, the Certificate Holder shall cooperate with local public safety authorities regarding the posting of warning signs on affected roads and the implementation of other reasonable safety measures.

(2) The Certificate Holder shall design the transmission lines and backup electricity lines so that alternating current electric fields shall not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public. [Amendment No. 1]

(3) The Certificate Holder shall design the transmission lines and backup electricity lines so that induced currents and voltage resulting from the transmission lines are as low as reasonably achievable. [Amendment No. 1]

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

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

(6) The Certificate Holder shall design, construct and operate the transmission lines and backup electricity lines in accordance with the requirements of the National Electrical Safety Code. [Amendment No. 1]

(7) The Certificate Holder shall take reasonable steps to reduce or manage exposure to electromagnetic fields (EMF), consistent with Council findings presented in the "Report of EMF Committee to the Energy Facility Siting Council," March 30, 1993, and subsequent findings. Effective on the date of this Site Certificate, the Certificate Holder shall provide information to the public, upon request, about EMF levels associated with the energy facility and related transmission lines and backup electricity lines. [Amendment No. 1]

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

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

E.1.d. Water Pollution Control Facilities Permit

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

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

F. CONDITIONS REQUIRED OR RECOMMENDED BY COUNCIL RULES

F.1. MANDATORY CONDITIONS IN SITE CERTIFICATES

Amendment of Site Certificate

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

Legal Description

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

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

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

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

General Requirements

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

(a) Substantially as described in the Site Certificate;

(b) In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the time the Council issues the Site Certificate; and,

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

Construction Rights on Site

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

(a) The Certificate Holder has construction rights on that part of the site; and,

(b) The Certificate Holder would construct and operate part of the facility on that part of the site even if a change in the planned route of the transmission line or pipeline occurs during the Certificate Holder's negotiations to acquire construction rights on another part of the site.

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

Beginning and Completing Construction

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

(a) The Certificate Holder shall report promptly to the Department the date that it began construction of the facility, as defined in OAR 345-001-0010. In reporting the beginning of construction, the Certificate Holder shall briefly describe all work on the site performed before beginning construction, including work performed before the Council issued the Site Certificate and work performed to construct the Port Westward to BPA Allston Substation Transmission Line, and shall state the cost of that work, pursuant to OAR 345-026-0048. If the Certificate Holder constructs the energy facility in phases, the Certificate Holder shall report the beginning of construction of each phase. [Amendment No. 1]

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

(6) The Certificate Holder shall complete construction of the facility by May 8, 2015. The completion of construction date is the day by which (1) the facility is substantially complete as defined by the Certificate Holder's construction contract documents; (2) acceptance testing is satisfactorily completed; and, (3) the energy facility is ready to commence continuous operation consistent with the Site Certificate. Completion of construction of the Port Westward to BPA Allston Substation Transmission Line separately shall not satisfy this requirement. [Amendments No. 2, 6, 8 & 9]

(a) The Certificate Holder shall report promptly to the Department the date it completed construction of the facility. If the Certificate Holder constructs the energy facility in phases, the Certificate Holder shall report the date of completion of each phase. [Amendment No. 1]

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

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

(7) The Certificate Holder shall begin construction of the BESS by November 22, 2022. [Amendment No. 11]

(8) The Certificate Holder shall compete construction of the BESS by November 22, 2025. [Amendment No. 11]

F.2 OTHER CONDITIONS BY RULE

Incident Reports

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

Rights-of-Way

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

Monitoring Programs

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

Compliance Plans

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

Reporting

(5) Within six months after beginning any construction, and every six months thereafter during construction of the energy facility and related or supporting facilities, the Certificate Holder shall submit a semi-annual construction progress report to the Council. In each construction progress report, the Certificate Holder shall describe any significant changes to major milestones for construction. When the reporting date coincides, the Certificate Holder may include the construction progress report within the annual report described in Condition F.2(6).

(6) The Certificate Holder shall, within 120 days after the end of each calendar year after beginning construction, submit an annual report to the Council that addresses the subjects listed in OAR 345-026-0080(2). The Council secretary and the Certificate Holder may, by mutual agreement, change the reporting date.

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

Schedule Modification

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

Correspondence with Other State or Federal Agencies

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

Notification of Incidents

(10) The Certificate Holder shall notify the Department within 72 hours of any occurrence involving the facility if:

(a) There is an attempt by anyone to interfere with its safe operation;

(b) A natural event such as an earthquake, flood, tsunami or tornado, or a human-caused event such as a fire or explosion affects or threatens to affect the public health and safety or the environment; or,

(c) There is any fatal injury at the facility.

G. GENERAL CONDITIONS

(1) The general arrangement of the Port Westward Generating Project shall be substantially as shown in the ASC.

(2) The Certificate Holder shall ensure that related or supporting facilities are constructed in the corridors described in this Order and as shown in ASC and in the manner described in this Order and the ASC.

(3) During construction and operation of the energy facility, the Certificate Holder shall house the combustion turbine in an enclosure that provides thermal insulation, acoustical attenuation, and fire extinguishing media containment and that would allow access for routine inspection and maintenance.

Successors and Assigns

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

Severability and Construction

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

Governing Law and Forum

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

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

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

ENERGY FACILITY SITING COUNCIL

By: _____ Nov. 22, 2019
Hanley Jenkins II, Chair Date

PORTLAND GENERAL ELECTRIC COMPANY

JDW

By: _____ 12/16/19
Authorized Signer Date

ATTACHMENTS:

ATTACHMENT A: MEMORANDUM OF UNDERSTANDING: MONETARY PATH PAYMENT REQUIREMENT
ATTACHMENT B: WATER POLLUTION CONTROL FACILITIES PERMIT (B.1) AND ANALYSIS (B.2)
ATTACHMENT C: REMOVAL/FILL PERMIT
ATTACHMENT D: AMENDED REVEGETATION AND NOXIOUS WEED CONTROL PLAN

Attachment A
Site Certificate
Port Westward Generating Project

MEMORANDUM OF UNDERSTANDING
THE CLIMATE TRUST AND PORTLAND GENERAL ELECTRIC COMPANY
CARBON DIOXIDE STANDARD IMPLEMENTATION
MONETARY PATH PAYMENT REQUIREMENT

[*If the parties agree, they may substitute a bond for the letter of credit.*]

THIS MEMORANDUM OF UNDERSTANDING (this "Agreement") is entered into as of the ___ day of _____, 200_, by and between Portland General Electric Company (the "Project Owner") in its capacity as owner of the Port Westward Generating Project, and The Climate Trust ("The Trust").

RECITALS

1. The Project Owner intends to design, finance, construct, own and operate a natural gas-fired combined-cycle combustion turbine electric generating facility with a base-load net electric power output of about 560 MW and a peaking net electric power output of about 650 MW near the City of Clatskanie, Oregon. The facility, together with its ancillary systems, shall be referred to herein as the "Project."

2. The State of Oregon requires new energy facilities to meet a carbon dioxide emissions standard as described in OAR 345-024-0550 through -0710.

3. As a condition to the siting of the Project, the Project Owner is required to provide offset funds ("Offset Funds") and selection and contracting funds ("Selection and Contracting Funds") to The Trust. In accordance with Section D.15 of the Site Certificate for the Port Westward Generating Project (the "Site Certificate") that the Oregon Energy Facility Siting Council (the "Council") granted to the Project Owner, dated November 8, 2002, the Project Owner shall establish a third-party letter of credit (the "Letter of Credit") in The Trust's name, acceptable to the Council, sufficient to meet the monetary path requirement. Under the terms and conditions of this Agreement, the monetary path payments will be disbursed to The Trust as specified in the Site Certificate and then by The Trust as specified in OAR 345-024-0710.

4. The Trust is a qualified organization within the meaning of OAR 345-001-0010(46).

NOW, THEREFORE, in consideration of the premises and mutual promises herein contained, the parties hereto agree as follows:

1. Initial Base-Load Monetary Path Payment and Initial Power Augmentation Monetary Path Payment.

1.1 The Project Owner has used the monetary path payment requirement calculations described in Section D.15 of the Site Certificate to calculate the Initial Base-Load Monetary Path Payment amount and has submitted them to the Oregon Office of Energy (the "Office") for verification. The Trust acknowledges that the calculation of the Initial Base-Load Monetary Path Payment in fourth quarter, 2002 dollars presented in Appendix A is correct and consistent with the Site Certificate.

1.2 The Project Owner has used the monetary path payment requirement calculations described in Section D.15 of the Site Certificate to calculate the Initial Power Augmentation Monetary Path Payment amount and has submitted them to the Office for verification. The Trust acknowledges that the calculation of the Initial Power Augmentation Monetary Path Payment in fourth quarter, 2002 dollars presented in Appendix A is correct and consistent with the Site Certificate.

1.3 The Site Certificate requires that the Selection and Contracting Funds portion of both the Initial Base-Load Monetary Path Payment and the Initial Power Augmentation Monetary Path Payment be adjusted for inflation to the date of disbursement to The Trust using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, published in the then current "Oregon Economic and Revenue Forecast" (the "Index"). The Project Owner shall pay to The Trust the Inflation-Adjusted Selection and Contracting Funds in the amount of $_____ contemporaneously with execution of this Agreement. The Trust acknowledges that the calculations of the Inflation-Adjusted Selection and Contracting Funds presented in Appendix A are correct and consistent with the Site Certificate.

1.4 Based on the verified calculations of the Initial Base-Load Monetary Path Payment and the Initial Power Augmentation Monetary Path Payment set forth in Appendix A, the Project Owner shall pay to the Trust $_____ in Offset Funds in fourth quarter, 2002 dollars pursuant to Section 1.6 below. The Site Certificate requires that the Offset Funds portion of both the Initial Base-Load Monetary Path Payment and the Initial Power Augmentation Monetary Path Payment be adjusted for inflation from the fourth quarter, 2002, to the date of disbursement to The Trust using the Index.

1.5 The Project Owner shall establish a Letter of Credit in the amount of $_____ in favor of The Trust, in the form attached as Appendix B to this Agreement. The effective date of the Letter of Credit shall be _____, 200_. The Trust shall be entitled to draw the entire amount of the Offset Funds secured by the Letter of Credit. The Project Owner shall pay the costs of establishing and maintaining the Letter of Credit and shall pay any transaction fees assessed by the issuer of the Letter of Credit.

1.6 The Trust shall have the right to draw Offset Funds upon execution of a letter of intent to acquire an offset project. At the sole discretion of The Trust, the amount of Offset Funds drawn may correspond to the entire amount of Offset Funds available. The Trust may request less than the entire amount of the Offset Funds, but in no case

shall the cumulative amount of all requests exceed the total Monetary Path Payment Requirement, as adjusted for inflation.

2. Year One True-Up Base-Load Monetary Path Payment and Year One True-Up Power Augmentation Monetary Path Payment.

2.1 The Project Owner shall, within 30 days of filing its Year One Test reports to Council, calculate the Year One True-Up Base-Load Monetary Path Payment, if any, and the Year One True-Up Power Augmentation Monetary Path Payment, if any, as required by Section D.15 of the Site Certificate. The Project Owner shall submit these calculations to the Oregon Office of Energy for verification, as required by Section D.15 of the Site Certificate.

2.2 Both the Year One True-Up Base-Load Monetary Path Payment and Year One True-Up Power Augmentation Monetary Path Payment, if any, shall be adjusted for 2002 dollars from the calendar quarter of the Site Certificate approval to the Disbursement Date using the Index.

2.3 If any Year One True-Up Base-Load Monetary Path Payment and/or Year One True-Up Power Augmentation Monetary Path Payment is due, the Project Owner shall pay this amount directly to The Trust within 30 days of filing its Year One Test report to the Council.

2.4 In no case shall the calculations of this Section 2 cause the funding for the Initial Base-Load Monetary Path Payment and the Initial Power Augmentation Monetary Path Payment made available to The Trust by the Letter of Credit to diminish.

3. Periodic Five-Year Power Augmentation Monetary Path Payments.

3.1 Each five years after beginning commercial operation, the Project Owner shall report the annual average hours of usage of power augmentation to the Office as required by Section D.15 of the Site Certificate.

3.2 If the Office of Energy determines that there are excess emissions for the five-year report period, the Office will specify the amount of Selection and Contracting Funds and Offset Funds that the Project Owner shall make available to The Trust. Each Periodic Five-Year Power Augmentation Monetary Path Payment, if any, shall be adjusted for inflation from fourth quarter, 2002, to the Disbursement Date using the Index.

3.3 For any Periodic Five-Year Power Augmentation Monetary Path Payment, the Selection and Contracting Funds shall equal 20 percent of the value of any Offset Funds up to the first $250,000 (in 2002 dollars) and 4.286 percent of the value of any Offset Funds in excess of $250,000 (in 2002 dollars).

3.4 The Project Owner shall disburse to The Trust the specified amount of any Periodic Five-Year Monetary Path Payment within 30 days of its notification by the Office of the amount that the Project Owner owes.

4. Undertaking by The Trust.

4.1 The Trust shall use the Initial Base-Load Monetary Path Payment and Initial Power Augmentation Monetary Path Payment, as well as any Year One True-Up Base-Load Monetary Path Payment, Year One True-Up Power Augmentation Monetary Path Payment, and/or Periodic Five-Year Power Augmentation Monetary Path Payments in accordance with OAR 345-024-0710.

4.2 With respect to the Offset Funds portions of any Initial Base-Load Monetary Path Payment, Initial Power Augmentation Monetary Path Payment, Year One Base-Load Monetary Path Payment, Year One Power Augmentation Monetary Path Payment, and/or Periodic Five-Year Power Augmentation Monetary Path Payments, The Trust shall spend at least 80 percent of the Offset Funds for contracts to implement offsets, and may use up to 20 percent of the Offset Funds for monitoring, evaluation, administration, and enforcement of contracts to implement offsets.

4.3 The Selection and Contracting Funds portions of any Initial Base-Load Monetary Path Payment, Initial Power Augmentation Monetary Path Payment, Year One Base-Load Monetary Path Payment, Year One Power Augmentation Monetary Path Payment, and/or Periodic Five-Year Power Augmentation Monetary Path Payments shall compensate The Trust for its costs of selecting offsets and contracting for the implementation of offsets and administrative costs related to operating The Trust as a qualified organization.

4.4 The Trust shall use its best efforts to remain a qualified organization, as defined in OAR 345-001-0010(45), until The Trust has used all funds received from the Project Owner.

4.5 The Trust shall notify the Project Owner of its intent to draw on the Letter of Credit at least one week before making a draw.

5. Limited Obligation of Project Owner.

The Trust acknowledges that, pursuant to OAR 345-024-0710(3), that the Project Owner and the Project shall have no obligation with regard to offsets for the Project other than to make available to The Trust the total amount of the monetary path payments.

6. Limited Participation by Project Owner in The Trust Decision Making.

The Project Owner shall appoint one nonvoting member to the Board of Directors of The Trust for a term lasting until The Trust has completed the contracting for the

offset funds provided by the Project Owner. The Project Owner shall have no approval rights over The Trust's offset contracts, disbursement of Offset Funds, or other day-to-day operations of The Trust.

7. Project Owner Agreement to Indemnify and Hold The Trust Harmless.

The Project Owner agrees to defend, hold harmless and indemnify The Trust from and against any and all claims, costs, liabilities, and expenses of any nature whatsoever, including reasonable attorneys' fees, resulting from or arising out of any failure by the Project Owner to make any payments required by this Agreement, or to establish the Letter of Credit described in Section 1.5 in a timely manner; PROVIDED, that the maximum amount of the Project Owner's liability to The Trust for claims, costs, liabilities and expenses, including attorneys' fees, arising out of the failure to make a payment or establish the Letter of Credit required by this Agreement in a timely manner shall not exceed twice the differential between the amount payable to The Trust on a particular date and the amount actually paid or made available to The Trust on or before that date. FURTHER PROVIDED, The Trust must make reasonable efforts to mitigate any losses, liabilities or expenses for which it seeks indemnification from the Project Owner.

8. General Provisions.

8.1 Governing Law: This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon. Any ambiguity that may arise under this Agreement shall be given a fair and reasonable construction in accordance with the intention of the parties and without regard to which party caused or is deemed to have caused such ambiguity to exist.

8.2 Amendments and Waivers: This Agreement may not be modified, supplemented, altered or amended, nor any provision hereof or rights hereunder be waived, except by an instrument in writing designated as an amendment of or waiver under this Agreement and signed by both parties. The waiver of any particular breach or default hereunder shall not constitute a waiver of any other breach or default. Failure or delay by any party to enforce any provision of this Agreement shall not in any way be construed as a waiver of such provision, nor shall it prevent such party from thereafter enforcing each and every provision of this Agreement.

8.3 Entire Agreement: This Agreement constitutes the entire agreement between the parties hereto as to the matters set forth herein, and all prior proposals, commitments, understandings and agreements, whether oral or in writing, as to such matters are superseded by this Agreement.

8.4 Assignment: The rights of the Project Owner under this Agreement may be assumed by any entity that acquires an ownership interest in the Project. Upon such assumption, such entity shall be deemed to be a party to this Agreement. The Trust may not assign this Agreement without the prior consent of the Project Owner and

Council; provided that, if the proposed assignee is a "qualified organization" as defined in OAR 345-001-0010(45), the Project Owner shall not unreasonably withhold such consent.

8.5 Third-Party Beneficiaries: Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies on any persons other than the parties hereto and their respective authorized successors and permitted assigns.

IN WITNESS WHEREOF, the parties have caused this Memorandum of Understanding to be executed by their respective duly authorized representatives, as of the day and year first above written.

PORTLAND GENERAL ELECTRIC COMPANY	THE CLIMATE TRUST
By:_____	By:_____
Name:_____	Name:_____
Title:_____	Title:_____
Date:_____	Date:_____

APPENDIX A: CALCULATION OF INITIAL BASE-LOAD AND POWER AUGMENTATION MONETARY PATH PAYMENT REQUIREMENT [NOT INCLUDED IN SITE CERTIFICATE]

APPENDIX B: FORM OF LETTER OF CREDIT

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APPENDIX B TO MEMORANDUM OF UNDERSTANDING
[FORM OF CLIMATE TRUST LETTER OF CREDIT]

[If a bond is used, the form of the bond shall be substantially in the form of the letter of credit.]

[Date]

BENEFICIARY:
The Climate Trust
516 SE Morrison Street, Suite 300
Portland, OR 97214
Attn: Mike Burnett, Executive Director

IRREVOCABLE LETTER OF CREDIT NO. _____

At the request and for the account of _____, we hereby issue in your favor our Irrevocable Letter of Credit No. _____ (this "Letter of Credit") for U.S. $_____ (the "Stated Amount").

We are informed that this Letter of Credit is issued to you pursuant to the Site Certificate for the Port Westward Generating Project, dated November 8, 2002.

Subject to the provisions herein, funds under this Letter of Credit are available against presentation of this Letter of Credit and your draft drawn at sight and marked "Drawn on _____ Letter of Credit No. _____," accompanied by a written certificate in the form of Annex A hereto with the blanks duly completed and purportedly signed by your Executive Director and dated as of even date with the draft.

Subject to the provisions herein, we hereby authorize you to draw hereunder in an amount not to exceed the Stated Amount from the date hereof through our close of business on the date on which the Stated Amount is reduced to zero by a drawing hereunder.

Partial drawings are permitted under this Letter of Credit. The amount available to be drawn under this Letter of Credit shall be automatically reduced by the amount of any drawings hereunder. Upon the payment of drawings that in the aggregate equal the Stated Amount, we shall be fully discharged of our obligation under this Letter at Credit and we shall not thereafter be obligated to make any further payments under this Letter of Credit.

Presentation of this Letter of Credit, such draft and such certificate shall be made at _____, by physical delivery of such documents to such office. _____ will accept physical delivery of such documents either by hand delivery, by mail, by overnight courier, or by any other commercially-accepted means of delivery. Our only obligation with regard to a drawing under this Letter of Credit shall be to examine such draft and certificate and to pay in accordance therewith if the same conforms to the terms and conditions of this Letter of Credit, and we shall not be obligated to make any inquiry in connection with the presentation of this Letter of Credit, the draft and the certificate.

If any request for payment hereunder is presented in compliance with the terms of this Letter of Credit to us at such address by ___ (local time) on any Business Day, payment will be made at or before _____ (local time) on _____, and if such request is so presented to us _____ (local time) on any Business Day, payment will be made at or before _____.

If a demand for payment made hereunder does not, in any instance, conform to the terms and conditions of this Letter of Credit, we shall give you prompt notice that your demand for payment was not effected in accordance with the terms and conditions of this Letter of Credit, stating the reasons therefore and that we will, upon your instructions, hold any documents at your disposal or return the same to you. Upon being notified that the demand for payment was not effected in conformity with this Letter of Credit, you may attempt to correct any such nonconforming demand to the extent you are able to do so; *provided, however*, that any draft or document presented to correct such nonconforming demand must be presented on or before the Termination Date.

Communications with respect to this Letter of Credit shall be in writing and shall be addressed to us at _____, specifically referring therein to this Letter of Credit by number.

As used herein, a "Business Day" shall mean any day other than Saturday or Sunday or a day on which banking institutions in the City of _____ are authorized or required by law to close.

Presentation of any certificate hereunder shall be deemed to be authentic if signed by a person purporting to be your Executive Director.

This Letter of Credit and the attached Annex A set forth in full our undertaking, and such undertaking shall not in any way be modified, amended, amplified, or limited by reference to any document, instrument or agreement referred to in this Letter of Credit, except only the certificates referred to herein, and any such reference shall not be deemed to incorporate herein by reference any document, instrument or agreement except for such certificates.

_____ hereby engages solely with The Climate Trust that drafts drawn hereunder and in compliance with the terms of this Letter of Credit will be duly honored upon presentation to us by our prompt payment to you of the amount specified in the certificate accompanying such draft.

This Letter of Credit and the attached Annex A shall be subject to the provisions (to the extent that such provisions are not inconsistent with this Letter of Credit) of the Uniform Customs and Practices for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500. To the extent that the provisions of this Letter of Credit are not covered by such Uniform Customs and Practices, this Letter of Credit shall be governed by and enforced and construed in accordance with the laws of the State of Oregon.

ANNEX A

[LETTERHEAD OF THE CLIMATE TRUST]

DRAW CERTIFICATE

IRREVOCABLE LETTER OF CREDIT NO.

The undersigned, the Executive Director of The Climate Trust (the "Beneficiary") hereby certifies to _____ (the "Issuing Bank") with reference to the Irrevocable Letter of Credit No. _____ (the "Letter of Credit") issued by the Issuing Bank in favor of the Beneficiary (any capitalized term used herein and not otherwise defined shall have the respective meaning set forth in the Letter of Credit) that:

1. The Beneficiary is making a drawing under the Letter of Credit pursuant to the Memorandum of Understanding dated _____, 200__, between The Climate Trust and Portland General Electric Company (the "MOU") in the amount of $_____ (the "Drawing Amount");

2. The Drawing Amount hereunder does not exceed the Stated Amount reduced by all previous drawings under the Letter of Credit; and

3. The Drawing Amount is not more than the amount that the Climate Trust is entitled to draw at this time under the terms of the MOU.

The Beneficiary hereby irrevocably authorizes and directs the Issuing Bank to pay the Drawing Amount in immediately available funds to The Climate Trust, Attention: Executive Director, by sending such payment by wire transfer to:

_____

IN WITNESS WHEREOF, the Beneficiary has executed and delivered this certificate as of the ____ day of _____, ____.

THE CLIMATE TRUST, as Beneficiary

By:_____
Name:
Executive Director

Expiration Date: 31-Mar-2012
Permit Number: DRAFT
File Number: 111764

WATER POLLUTION CONTROL FACILITIES PERMIT

Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue, Suite 400, Portland, OR 97201
Telephone: (503) 229-5263

Issued pursuant to ORS 468B.050

ISSUED TO:

Portland General Electric
121 SW Salmon Street
Portland, Oregon 97204

SOURCES COVERED BY THIS PERMIT:

Type of Waste	System	Method of Treatment/Disposal
Domestic Sewage	001	Bottomless sand filter

SYSTEM TYPE AND LOCATION:
On-Site Sewage Treatment and Disposal

Port Westward Generating Plant
80997 Kallunki Road
City/Town: Clatskanie

Located in: Sect. 15&22, T8N,R4W
Latitude: 46.1800
Longitude: -123.1717

RIVER BASIN INFORMATION:

Hydro Code: 10=-COLU 51.3 N

COUNTY:
Columbia

Issued in response to Application No. 986243.
This permit is issued based on the Final Order in the Matter of the Application for a Site Certificate for the Port Westward Generating Project in lieu of a Land Use Compatibility Statement.

Robert P. Baumgartner, Water Quality Manager
Northwest Region

Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and disposal system in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

Discharge of untreated or partially treated sewage or septic tank effluent directly or indirectly onto the ground surface or into surface waters constitutes a public health hazard and is prohibited. This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule or standard.

SCHEDULE A

Waste Disposal Limitations

1. The permittee is authorized to operate and maintain a domestic sewage treatment and disposal facility consisting of a bottomless sand filter unit with final disposal to the soil beneath the filter and in compliance with the following conditions:

   a) The average daily sewage flow to the SAND FILTER should be approximately fifty percent (50%) of the maximum daily or peak flow to the treatment system. The maximum peak daily flow shall not exceed the following unless otherwise approved by the Department:

System	Maximum Daily Flow
1	1200 gpd

   b) The **influent** to the treatment unit shall not exceed the following maximum concentrations:

Parameter	Limitation
BOD5	300 mg/l
Greases and Oil	25 mg/l
TSS	150 mg/l
TKN	150 mg/l

   c) The **effluent** from the treatment unit shall not exceed the following maximum concentrations:

Parameter	Limitation
BOD5	20 mg/l
TSS	20 mg/l

   d) No discharge to surface waters is permitted. All wastewater shall be distributed into the soil beneath the filter so as to prevent:

      1) Surfacing of wastewater on the ground surface, surface runoff or subsurface drainage through drainage tile.

      2) The creation of odors, fly and mosquito breeding and other nuisance conditions.

      3) The overloading of land with nutrients or organics.

      4) Impairment of existing or potential beneficial uses of groundwater.

2. No cooling water, air conditioner water, water softener brine, groundwater, oil, hazardous materials, roof drainage, storm water runoff, or other aqueous or non-aqueous substances which are, in the judgment of the Department, detrimental to the performance of the system or to groundwater, shall be discharged into the sewage treatment system, unless specifically approved in writing by the Department.

3. No Activities shall be conducted that could cause an adverse impact on existing or potential beneficial uses of groundwater.

SCHEDULE B

Minimum Monitoring and Reporting Requirements

1. System Monitoring Requirements
The permittee shall monitor the operation and efficiency of all treatment and disposal facilities. Sampling and measurements taken as required herein shall be representative of the nature of the wastewater, and shall be taken at peak usage during operation of the system. Unless otherwise agreed to in writing by the Department of Environmental Quality, data collected, and submitted shall include but not necessarily be limited to the following parameters and minimum frequencies:

a. **Influent to the Treatment Unit**

Item or Parameter	Minimum Frequency	Type of Sample
Sewage Flow, GPD	Monthly Average	Measurement or calculation based on meter readings
Flow Meter Calibration	Annually	Verification

b. **Effluent from the Sand filter;**

Item or Parameter	Minimum Frequency	Type of Sample
BOD_5	Semi-annually *	Grab
TSS	Semi-annually *	Grab
NH_3-N	Annually *	Grab
NO_3+ NO_2-N	Annually *	Grab
TKN	Annually *	Grab

*Upon receipt of a five year contract in place with a maintenance entity acceptable to the Department, the Department will reduce sampling frequency during the first five years of the permit to one time, to be done during the fifth year of the permit. The Department may allow some reduction of the sampling following the fifth year of the permit if the second five year contract is in place after the end of the first five year contract.

c. **Operations and Maintenance Activities**
The permittee shall record in writing all observations of operation and maintenance activities as required in the Department approved Operation and Maintenance Plan on a monthly basis.

d. **Solids Management**
The permittee shall maintain a record of the pumping dates and quantity in gallons, of solids/wastewater pumped, and what licensed sewage disposal service company pumped the solids/wastewater, as well as the final disposal location and transfer locale (if applicable).

2. Reporting Procedures
Monitoring, maintenance practices, solids handling, and results shall be reported on Department approved forms. The reporting period is the calendar year. Reports must be submitted to the DEQ office listed on the face page of this permit by **January 15 following the reporting period.**

SCHEDULE D

Special Conditions

1. The permittee shall maintain on file a complete Operation and Maintenance (O&M) Plan approved by the Department. The permittee shall operate, manage and implement preventative maintenance practices or corrections at the frequencies required in the Department approved O&M Plan. Any changes to the plan must be approved by the Department.

2. In the event that a concentration limit, as specified in Schedule A, to the soil beneath the filter is exceeded, the permittee shall within fourteen (14) working days of receipt of the analytical results:

    a) Report the results to the Department;

    b) Resample to verify the results; and

    c) In the event that the resampling confirms a concentration limit violation, within thirty (30) days of confirmation, the permittee shall submit to the Department a corrective action plan to reduce the waste strength so that the concentration limits are not violated. Upon Department approval, the plan shall be implemented by the permittee.

3. The permittee shall contract with a licensed sewage disposal service as defined in Oregon Administrative Rule 340-71-100 for management of all septage/sludge.

4. All bench sheets, laboratory analysis sheets, and other records to support the data reported on the Discharge Monitoring Report (DMR) shall be prepared in ink and shall be kept on file for a period of at least 3 years from the date of the sample, measurement, report or application. Pencil entries or liquid paper corrections are prohibited and shall be considered Class I violations of the permit. Changes to any supporting records that may be required to correct the original data may be made by lining through the original data. The date of the change and the initials of the individual making the change shall be recorded in ink adjacent to the change.

5. The sand filter area including replacement area shall not be subject to activities that would, in the opinion of the Department, adversely affect the soil or the functioning of the system. This includes, but is not limited to, vehicular or animal traffic, filling or cutting, covering the area with asphalt or concrete, or subjecting the area to excessive saturation.

6. The permittee shall not be required to perform a formal hydrogeologic characterization or preliminary groundwater monitoring during the term of this permit provided that the facilities are operated in accordance with the permit conditions, and there are no apparent adverse groundwater quality impacts (complaints or other indirect evidence) resulting from the facility's operation. If warranted, the Department may evaluate the need for or require a full assessment of the facility's impact on groundwater quality and if necessary may reopen this permit to include groundwater monitoring parameters.

7. An adequate contingency plan for prevention and handling of spills and unplanned discharges shall be in force at all times. The permittee shall immediately notify the DEQ office listed on the face page of this permit and the local County Health Department of any occurrence of surfacing sewage. If a spill does occur that reaches or threatens to reach public waters, the permittee shall immediately notify Oregon Emergency Response (OER) at 1-800-452-0311.

SCHEDULE F

General Conditions

SECTION A. - STANDARD CONDITIONS

1. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws, or regulations.

2. Liability

The Department of Environmental Quality, its officers, agents, or employees shall not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities because of this permit.

3. Permit Actions

After notice by the Department, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:

a. Violation of any term or condition of this permit, any applicable rule or statute, or any order of the Commission;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.

4. Transfer of Permit

This permit shall not be transferred to a third party without prior written approval from the Department. Such approval may be granted by the Department where the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of this permit and the rules of the Commission. A transfer application and filing fee must be submitted to the Department.

5. Permit Fees

The permittee shall pay the fees required to be filed with this permit application and to be paid annually for permit compliance determination as outlined in the Oregon Administrative Rules.

SECTION B. - OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and properly operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

2. Standard Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

a. At all times, all facilities shall be operated as efficiently as possible and in a manner which will prevent discharges, health hazards, and nuisance conditions.

b. All screenings, grit, and sludge shall be disposed of in a manner approved by the Department such as to prevent any pollutant from such materials from reaching any waters of the state, creating a public health hazard, or causing a nuisance condition.

c. Bypassing of untreated waste is generally prohibited. No bypassing shall occur without prior written permission from the Department except where unavoidable to prevent loss of life, personal injury, or severe property damage.

3. Noncompliance and Notification Procedures

In the event the permittee is unable to comply with all the conditions of this permit because of surfacing sewage, a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, the permittee shall:

a. Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.

b. Immediately notify the Department's Regional office, so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.

c. Within 5 days of the time the permittee becomes aware of the circumstances, the permittee shall submit to the Department a detailed written report describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

4. Wastewater System Personnel

The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and monitoring requirements to assure continuous compliance with the conditions of this permit.

SECTION C. - MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall, at all reasonable times, allow authorized representatives of the Department of Environmental Quality to:

a. Enter upon the permittee's premises where a waste source or disposal system is located or where any records are required to be kept under the terms and conditions of this permit;

b. Have access to and copy any records required to be kept under the terms and conditions of this permit;

c. Inspect any treatment or disposal system, practices, operations, monitoring equipment, or monitoring method regulated or required by this permit; or

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

2. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean.

3. Retention of Records

The permittee shall retain records of all monitoring and maintenance information, including all calibrations, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. The Director may extend this period at any time.

SECTION D. - REPORTING REQUIREMENTS

1. Plan Submittal

Pursuant to Oregon Revised Statute 468B.055, unless specifically exempted by rule, no construction, installation or modification of disposal systems, treatment works, or sewerage systems shall be commenced until plans and specifications are submitted to and approved in writing by the Department. All construction, installation or modification shall be in strict conformance with the Department's written approval of the plans.

2. Change in Discharge

Whenever a facility expansion, production increase, or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans have been approved and a new permit or permit modification has been issued.

3. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified by the official applicant of record (owner) or authorized designee.

SECTION E. DEFINITIONS

1. BOD_5 means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. FC means fecal coliform bacteria.
4. NH_3-N means Ammonia Nitrogen.
5. NO_3-N means Nitrate Nitrogen.
6. NO_2-N means Nitrite Nitrogen.
7. TKN means Total Kjeldahl Nitrogen.
8. Cl means Chloride.
9. TN means Total Nitrogen.
10. mg/L means milligrams per liter.
11. µg/L means micrograms per liter.
12. kg means kilograms.
13. GPD means gallons per day.
14. MGD means million gallons per day.
15. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
16. Total residual chlorine means combined chlorine forms plus free residual chlorine.
17. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
18. Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of flow at the time of sampling.
19. Week means a calendar week of Sunday through Saturday.
20. Month means a calendar month.
21. Quarter means January through March, April through June, July through September, or October through December.

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
LARGE ONSITE WPCF PERMIT EVALUATION
May 1, 2002

Permittee:	Portland General Electric 121 SW Salmon Street Portland, Oregon 97204 File Number: 111764	Manager Approval Initials:	
Source Contact:	Arya Behbehani-Divers	Telephone Number: (503) 464-8141	
Source Location:	80997 Kallunki Road, Clatskanie		
County:	Columbia		
Permit Writer:	Anne Cox	NWR Office	
Proposed Action:	New WPCF-OS	Application No.: 986243	Date Received: 3/29/02

Introduction
Under Oregon Administrative Rule Chapter 340 Division 71 Section 130 (15) [OAR 340-71-130(15)], any person proposing a sand filter system to serve a commercial facility shall obtain a WPCF permit from the Department of Environmental Quality.

This area was originally evaluated for on-site sewage disposal by Columbia County onsite staff. On February 8, 2002, the Department confirmed the evaluation of this site in relation to the proposed PGE facility.

Facility Description

Total Design Flow of Facility	1,200 Gallons per day
Number of Systems	One

System #1

Date Constructed	To be constructed in 2002 or later
Design Capacity	1,200 gpd
Facilities Served	Sanitary facilities for the Port Westward Generating plant, bathrooms &sinks.
Type of Treatment	Bottomless Sand filter
Type of Soils	Sand

Comments: Latitude and Longitude for the test pit area is 46 10 41, -123 10 16.

Groundwater
As part of this permit evaluation, a groundwater prioritization screening was done. The results of this screening is as follows:

For new and existing drainfield systems (confirm all statements given as true or false:	
1. Based on the depth to the water table underline the applicable statement and confirm it as either true or false: A. Depth to water table is less than 100 feet: System design flow is less than 5,000 gpd. B. Depth to water table is between 100 and 300 feet; system design flow is less than 10,000 gpd. C. Depth to water table is greater than 300 feet; system design flow is less than 15,000 gpd.	True
2. System is not located in Groundwater Management Area where an identified contaminant of concern may be associated with domestic wastewater.	True
3. Drainfield is not located within: 1000 feet of an existing public or private drinking water supply well or a designated Wellhead Protection Area, And, all land within 1000 feet of the system is zoned such that no drinking water wells are likely to be installed in the future.	False
4. No industrial sources discharge to the system	True
5. There are no exceptional situations under which the system may require further groundwater review to determine the likelihood of an adverse impact.	True

If all answers are true, then no further information is needed.

If any answers are false, has additional information been gathered to satisfy the permit writer and groundwater reviewer that the facility actually has a low potential to adversely impact groundwater? **Yes** If yes, provide details.

All domestic wells are over the 100 foot setback required by OAR 340-71. In fact there are no wells within ½ mile of the project. The initial groundwater in this area is essentially the Columbia River and can be expected to discharge to the river.

The projected sewage flow from this facility is 1,200 gpd, equivalent to 2.6 residential homes located on a parcel of 19 acres. Sand filter effluent is expected to produce 10 mg/l BOD, 10 mg/l TSS, reduce bacteria counts by 98 to 99% and lowers total nitrogen by approximately 50%. The site meets Division 71 Onsite rules criteria for approval of a bottomless sand filter. The proposed flows will be low. The potential to impact the groundwater is negligible.

Compliance History
This is a new permit. There is no compliance history.

PERMIT DISCUSSION

Schedule A – Waste Disposal Limitations
Schedule A contains the following limitations for each system:

- x System Maximum Daily flow
- x Influent maximum concentrations (Sand Filters and RGFs only)
- x Effluent maximum concentrations
- x Prohibition of discharges to surface waters
- x Prohibition of discharge of detrimental substances to system
- x Groundwater restrictions.

Schedule B – Minimum Monitoring and Reporting Requirements
Monitoring parameters and frequencies are based on the Department monitoring matrix. Any modifications are listed as follows:

If the permittee enters into a five year maintenance contract with an acceptable entity, the Department will reduce sampling requirements to one time during that period, at the fifth year of the permit. Further reduction in sampling can be allowed after the fifth year of the permit if the permittee enters into another five year contract.

Schedule D – Special Conditions
Schedule D contains the following special conditions:

- x Operations and Maintenance Requirements
- x Septage/sludge management
- x Maintenance of vegetation in the drainfield area
- x Prohibition of activities that would adversely affect the soil or functioning of the system.
- x Contingency plan requirement
- x Groundwater Requirements

Schedule F – General Conditions
This Schedule contains general conditions that are applicable to all WPCF permits in Oregon.

Division of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503-378-3805

Permit No.:	**25248-FP**
Permit Type:	**Fill**
Waterway:	**Columbia River/Wetlands**
County:	**Columbia**
Expiration Date:	
Corps No.:	

PORTLAND GENERAL ELECTRIC

IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE REMOVAL/FILL APPLICATION SUBMITTED AS PART OF THE APPLICATION FOR A SITE CERTIFICATE FOR THE PORT WESTWARD GENERATING PROJECT, FILED APRIL 11, 2002, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. A copy of the permit shall be available at the work site whenever operations authorized by the permit are being conducted.
6. Employees of the Division of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
7. The Division of State Lands issues this permit pursuant to the Site Certificate for the Port Westward Generating Project, issued by the Oregon Energy Facility Siting Council, November 8, 2002.
8. In issuing this permit, the Division of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
9. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.

NOTICE: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Division of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Division of State Lands, 503-378-3805.

Lori Warner, Manager
Western Region Field Operations
Oregon Division of State Lands

Authorized Signature **Date Issued**

ATTACHMENT A to Removal/Fill Permit

Special Conditions for Removal/Fill Permit No. 25248-FP. PLEASE READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT. This project may be site inspected by the Division of State Lands as part of our monitoring program. The Division has the right to stop or modify the project at any time if you are not in compliance with these conditions. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. This permit authorizes the placement of up to 3,000 cubic yards of gravel sand and silt and removal of up to 4,500 cubic yards of silt and clay in T8N, R4W, Sections 15 and 22, Tax Lots 3 and 4 in wetlands and Columbia River, Columbia County for power generation facility, transmission line, and water intake station upgrades, as outlined in the attached permit application, map and drawings, dated April 11, 2002 (Application). Removal-fill activity for wastewater discharge line and river outfall is specifically not authorized by this permit.

2. This permit authorizes removal and fill activities necessary to complete the required compensatory mitigation.

3. TURBIDITY/EROSION CONTROLS. The authorized work shall not cause turbidity of affected waters to exceed 10% over natural background turbidity 100 feet downstream of the fill point. For projects proposed in areas with no discernible gradient break (gradient of 2% or less), monitoring shall take place at 4 hour intervals and the turbidity standard may be exceeded for a maximum of one monitoring interval per 24 hour work period provided all practicable control measures have been implemented. This turbidity standard exceedance interval applies only to coastal lowlands and floodplains, valley bottoms and other low-lying and/or relatively flat land.

   For projects in all other areas, the turbidity standard can be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented. These projects may also be subject to additional reporting requirements.

   Turbidity shall be monitored during active in-water work periods. Monitoring points shall be at an undisturbed site (representative background) 100 feet upstream from the turbidity causing activity (i.e., fill or discharge point), 100 feet downstream from the fill point, and at the point of fill. A turbidimeter is recommended, however, visual gauging is acceptable. Turbidity that is visible over background is considered an exceedance of the standard.

   Practicable erosion control measures which shall be implemented, as appropriate, include but are not limited to the following:

a. Place fill in the water using methods that avoid disturbance to the maximum practicable extent (e.g. placing fill with a machine rather than end-dumping from a truck).
b. Prevent all construction materials and debris from entering waterway;
c. Use filter bags, sediment fences, sediment traps or catch basins, silt curtains, leave strips or berms, Jersey barriers, sand bags, or other measures sufficient to prevent movement of soil;
d. Use impervious materials to cover stockpiles when unattended or during rain event;
e. Erosion control measures shall be inspected and maintained daily to ensure their continued effectiveness;
f. No heavy machinery in a wetland or other waterway;
g. Use a gravel staging area and construction access;
h. Fence off planted areas to protect from disturbance and/or erosion; and
i. Flag or fence off wetlands adjacent to the construction area.

4. Erosion control measures shall be maintained as necessary to ensure their continued effectiveness, until soils become stabilized. All erosion control structures shall be removed when project is complete and soils are stabilized and vegetated.

5. Fill and removal activities in the Columbia River shall be conducted between November 1 and February 28, unless otherwise coordinated with ODFW and approved in writing by ODSL.

6. Petroleum products, chemicals, or other deleterious materials shall not be allowed to enter waters of the state.

7. No fresh concrete shall be allowed to come into contact with waters of the state unless otherwise coordinated with ODFW and approved in writing by ODSL.

8. Waste materials and spoils shall be placed in a stable upland location above the top of bank and shall be suitably stabilized to prevent erosion.

9. If any archaeological resources and/or artifacts are uncovered during excavation, all construction activity shall immediately cease. The State Historic Preservation Office shall be contacted (phone: 503-378-4168).

10. The Division of State Lands retains the authority to temporarily halt or modify the project within the scope of the site certificate issued by the Energy Facility Siting Council in case of unforeseen damage to natural resources.

11. The permittee is responsible for carrying-out the terms and conditions of this permit unless the permit is transferred to another party using forms provided by the Division.

Compensatory Wetland Mitigation

The following conditions apply to the actions described in the Application, Appendix J-3, Wetland Mitigation Plan, dated May 2002 (Mitigation Plan). The issuance of this permit is contingent upon the successful compensatory wetland mitigation for the loss of 0.41 acres of wetlands resulting from power generating facility development and up to 0.02 acres of wetlands resulting from construction of transmission towers for a total of 0.43 acres impact.

12. On-site compensatory mitigation for the loss of 0.43 acres of palustrine emergent, seasonally saturated (PEMc) and scrub-shrub (PSSc), riverine flow-through (RFT)/depressional wetland, shall consist of 1.5 acres of enhancement to PEMc, PSSc, palustrine forested (PFO), RFT/depressional wetland.

13. Mitigation for temporary impacts (0.03 acres) resulting from water supply line installation shall consist of rehabilitation to original ground contours and re-vegetation with appropriate wetland seed mix upon re-establishment of original contours. Similar rehabilitation shall also be provided for any temporary wetland impacts associated with transmission towers installation (e.g., equipment ruts, tracks). During trenching or excavation, the top layer of soil shall be separated from the rest of the excavated material and put back on top when the trench or pit is back-filled. If the native underlying soils are not used as bedding material, and a coarser, non-native soil or other material is used, preventative measures such as clay or concrete plugs shall be used so that underground hydraulic piping does not occur and de-water the site and adjacent wetlands. Failure to comply with this condition may result in additional compensatory mitigation.

14. Mitigation shall be completed prior to or concurrent with the wetland fill project and otherwise consistent with Mitigation Plan, Section 10, Vegetation Management.

15. The wetland enhancement area shall be graded to the elevations described in Mitigation Plan, Section 10 and Figures J-3.5 and J-3.6.

16. Prior to any site grading, the surveyed boundaries of the wetland mitigation area and the avoided wetlands shall be surrounded by silt fencing at all times during construction of the project. There shall be no heavy equipment in this area except during mitigation construction.

17. An as-built survey shall be provided to the Division of State Lands within 60 days of mitigation site grading.

18. The mitigation site shall be planted in types, numbers and zones described in Mitigation Plan, Plant Schedule (Figure J-3.5). No existing trees shall be removed within the wetland mitigation area. Any significant variation in the plant schedule shall be referred to the Division for approval prior to execution. In the event that Cottonwood does not volunteer in the mitigation area in numbers/density consistent with the reference site by the end of the 3rd year, the planting plan shall be supplemented with cottonwood plantings. Proposed numbers shall be provided to the Division for approval prior to execution.

19. Removal or control of invasive, non-native plant species shall be done by means including preliminary site grading, mowing, herbicide application and/or by-hand removal, as appropriate. Livestock grazing shall not be allowed in the mitigation area.

20. The mitigation site shall be irrigated as necessary to avoid water stress for two years after the completion of planting.

21. Large woody debris shall be placed at the mitigation site locations identified in the Mitigation Plan, Figure J-3.6.

Success Criteria

To be deemed successful, the mitigation areas shall meet the following success criteria:

22. Cover of planted herbaceous material and desirable native wetland recruits (FAC+ or wetter) in designated PEMc areas shall be at least 80% after the 3rd year (as measured by cover in representative plots) and remain at least 80% for the remainder of the monitoring period.

23. Survival of planted trees and shrubs (by species) shall be at least 80% for the duration of the monitoring period (as measured by total stem counts). Should cottonwood not volunteer into the mitigation area in numbers consistent with the reference site by year 3, remedial action shall be taken in consultation with the Division.

24. There shall be no more than 30 percent cover of non-native species at any time during the monitoring period.

25. Mitigation site micro-topography shall meet grading design per Mitigation Plan, Figures J-3.5 and J-3.6 and including large woody debris placement pursuant to Mitigation Plan, Figure J-3.6.

26. The mitigation site shall exhibit characteristics of PFO/PSS wetland (0.9 acres) and PEMc wetland (0.6 acres) consistent with Cowardin definitions for said wetland types by the end of the monitoring period.

Mitigation Monitoring

27. The permittee shall monitor the mitigation site to determine success for a minimum period of five (5) years. The annual monitoring report is due by December 31 of each year and shall include the following information:

- Permit number, permittee's name, project name
- Location of mitigation site: describe and show on current map.
- Location of impact site
- Description of all activities that have occurred on the mitigation site during the past year (i.e. grading, re-grading, planting, re-planting, weed eradication, etc.).
- Documentation that success criteria are being met and statements regarding criteria listed in conditions 22 through 26, above.
- Results of hydrologic monitoring to be conducted during early growing season including depth to saturation, extent of inundation and presence of secondary hydrologic indicators in the mitigation area.
- Qualitative comparison/discussion of the mitigation site performance relative to the reference site.
- Photographs from a minimum of three fixed photo-monitoring locations.
- Recommendations for remedial or maintenance actions, as necessary
- Other information necessary or required to document compliance with mitigation plan.

The monitoring period will start when the permittee has demonstrated that hydrology has been established and initial plantings have been accomplished. Failure to submit a monitoring report at the above date may result in an extension of the monitoring period and/or enforcement action.

Contingency

28. In the event that non-native plant cover exceeds 30% at any time during the monitoring period or less than 80% coverage/80% survival occurs in the emergent/shrub-tree area, the permittee shall submit to the Division, for

approval, a contingency plan describing specific actions and timeframes to return the site to design conditions.

29. Removal of the berm across the existing drainage channel shall only occur with the prior approval of the Division and shall be based on demonstration of successful hydrologic conditions and cover of desirable emergent species.

30. The Division retains the authority to extend the mitigation monitoring period and require corrective action in the event the success criteria are not accomplished for two consecutive years (without re-planting for failure to meet survival or cover criteria) within the 5-year monitoring period.

_____, 200___

Revegetation and Noxious Weed Control Plan
Port Westward Generating Project

Submitted by:

Portland General Electric

Revision 1, April 2019

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1.0 INTRODUCTION

Portland General Electric Company (PGE) began commercial operation of Unit 1 of the Port Westward Generating Project (PGWP Unit1) in June 2007. Construction of PGWP Unit 2 began in May 2013 and the project started commercial operation on December 30, 2014. Major soil disturbance activities associated with plant site preparation and construction included rough grading, excavation, filling, stockpiling, and final grading. Following the completion of construction activity, erosion control and revegetation measures were conducted as required in the original site certificate (Unit 1) and tenth amended site certificate (Unit 2) issued by the Oregon Energy Facility Siting Council (OR-EFSC 2006, 2013) and consistent with the project Erosion and Sediment Control Plan and the original Revegetation and Invasive Species Monitoring Plan (RISMP, PGE 2006).

Revegetation and monitoring of temporary disturbance areas associated with PGWP Unit 1 was conducted in 2007 through 2011 (PGE 2011). Monitoring of PWGP Unit 2 temporary disturbance areas is in progress, with the initial five-year monitoring program to be completed in 2019 (PGE 2018).

This revised revegetation monitoring plan will apply to completion of revegetation monitoring for Unit 2 construction as well as revegetation and monitoring of any additional temporary disturbance areas that result from construction of the Port Westward Battery Storage project (Amendment 11). The plan specifies methods and schedule for evaluating the success of revegetation measures and implementing follow-up remedial measures (reseeding and invasive species control) as necessary, and details revegetation success criteria and reporting requirements. The plan is being submitted for approval by the Oregon Department of Energy (Department) as required by the Site Certificate.

2.0 REVEGETATION MEASURES

Following construction, PGE will implement the revegetation measures stipulated in the Site Certificate. As appropriate at specific locations, revegetation measures include:

- Reseeding of all soil disturbance areas to restore vegetation;
- Application of mulch and straw wattles to prevent soil erosion during vegetation re-establishment.

PGE plans to use the following seed mix for revegetation of any upland disturbance areas associated with the battery storage project or for any necessary follow-up seedings of the Unit 2 revegetation areas. This seed mix may be changed with concurrence of Oregon Department of Fish and Wildlife (ODFW) and Department concurrence.

Upland Mix (50% grasses, 35% perennial flowers, 15% annual flowers)

California Brome - *Bromus carinatus*
California oatgrass (*Danthonia californica*)
Red fescue (*Festuca rubra*)
Streambank Lupine - *Lupinus rivularis*
California Poppy - *Eschscholzia californica*
Farewell to Spring - *Clarkia amoena*
Western Yarrow - *Achillea millefolium*
Lance Self-heal - *Prunella vulgaris v. lanceolata*
Baby Blue Eyes - *Nemophila menziesii*

3.0 MONITORING METHODS AND SCHEDULE

Annual surveys will be conducted for a period of five years to monitor revegetation success and invasive species control needs at all temporary disturbance areas impacted by project construction. The five-year monitoring period for Unit 2 disturbance areas will be completed in 2019, after which PGE will consult with ODFW and ODOE regarding success criteria (See Section 5.0).

All revegetation areas will be visually surveyed by a qualified PGE biologist. During each annual monitoring visit, the surveyor will collect the following information:

- Confirmation that all areas requiring revegetation have been seeded;
- Success of vegetation establishment as measured by: percent vegetative cover by species; percent bare soil; and percent other ground covers (i.e., gravel or litter) (ocular estimates using 10, randomly-located, $1m^2$ sampling quadrats in each revegetation area). Paired plots may also be used to compare sampling results to vegetation in nearby undisturbed areas;
- Presence of invasive plant species (species listed as noxious under the Oregon Department of Agriculture Noxious Weed Control Program), and density estimates by species if present (in sampling quadrats and overall ocular estimated by revegetation area); and
- Presence of erosion problems that require further mitigation measures.

4.0 FOLLOW-UP RESTORATION MEASURES

Following each of the surveys described above, PGE will conduct follow-up measures as needed to address remaining soil impacts and revegetation requirements not achieved through initial plantings. Such follow-up measures may include:

- Reseeding of select areas where significant areas of bare soil remain after establishment of initial seeding;
- Control of invasive plant species by qualified personnel using appropriate methods for the target species (i.e. herbicides applied per label requirements if herbicides required).

5.0 REVEGETATION SUCCESS CRITERIA

Revegetation will generally be considered successful when the revegetated areas support non-noxious plant communities that are at a minimum similar in vegetation percent cover and erosion potential comparable to surrounding undisturbed areas. When the site certificate holder

determines that an area of the project has been successfully restored by satisfying all success criteria, this will be stated in the annual revegetation report. If ODFW and the Department concur, the site certificate holder will conclude that it has no further obligation to perform revegetation activities in that area of the project.

The goal for each soil disturbance site will be a minimum of 80 percent vegetation cover (of seeded vegetation and desirable, naturally-recruiting species and excluding invasive plant/noxious weed cover) and no ongoing erosion issues. Reseeding or replanting efforts will occur, in consultation with ODFW and the Department, in any area where monitoring identifies a restoration failure.

The following criteria will be used to determine success of revegetation efforts:

1. The vegetation percent cover by native species and desirable non-native species (i.e., non-noxious weeds, both seeded and naturally recruited) is 80 percent or more, or the native species component is not significantly less than the native species percent cover of surrounding undisturbed areas.
2. Noxious weeds are absent or constitute only a small percentage (<5%) of vegetation otherwise dominated by native or desirable non-native species.
3. The percentage of bare soil (excluding rocky areas) in the sample plot is <10%, or not significantly greater than the percentage of bare soil in surrounding undisturbed areas.
4. Vegetation percent cover goals may be adjusted to match the typical percent cover in nearby undisturbed areas as measured with paired monitoring plots.

6.0 REPORTING SCHEDULE

Within one year after completion of construction of any phase of the facility PGE shall provide a summary report to ODFW and the Department that identifies the revegetation actions it took and the results of revegetation monitoring conducted to that time. PGE will submit an annual report to ODFW and the Department by December 31 of each year during the five-year monitoring period required for each revegetation area. The final annual report will be submitted within three months of the final annual monitoring survey. Annual reports will identify revegetation actions taken in construction disturbance areas at the Port Westward Generating Project, the results of vegetation monitoring, and invasive species control measures implemented to date. The final annual report will document achievement of success criteria, or, if criteria have not been met, propose additional mitigation and monitoring measures to be implemented.

7.0 AMENDMENT OF PLAN

This Plan may be amended from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such amendments may be made without amendment of the site certificate. The Council authorizes the Department to agree to amendments to this Plan. The Department shall notify the Council of all amendments, and the Council retains the authority to approve, reject, or modify any amendment of this Plan agreed to by the Department.