

BOARDMAN POWER PLANT

AMENDMENT NO. 9

to the

SITE CERTIFICATION AGREEMENT

between

THE STATE OF OREGON

and

PORTLAND GENERAL ELECTRIC COMPANY

INDEX

NOTE: A site certificate holder is required to comply with rules of the Council in effect on the date of certification. For the reader's convenience, rules pertinent to performance by site certificate holders are attached as an Exhibit.

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FIGURE 1 - BOARDMAN PROJECT*

FIGURE 2 – BOARDMAN SITE BOUNDARY

BOARDMAN SITE CERTIFICATE LAND DESCRIPTION

* Figure 1 was not changed by Amendment No. 9

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This Certification Agreement (the Agreement) was made and entered into March 24, 1975 in the manner provided in ORS 453.305 to 453.575 (1974) and 453.994 (1974), by and between the State of Oregon, acting by and through the Governor of the State of Oregon (State) and Portland General Electric Company (PGE), an Oregon corporation.

I. SITE CERTIFICATION

- A. Pursuant to the Agreement, as amended by Amendment Nos. 1 through 6, a thermal power plant and associated facilities was constructed at the Boardman Site (the Boardman Plant). The Boardman Plant has been constructed and was placed into service on August 3, 1980. Amendment No. 7, approved on March 22, 1994, did not replace the Agreement or revise the Agreement in its entirety, but eliminated from the Agreement those provisions regarding "Banked Plants" and consolidated in a single amendment those provisions from the Agreement and Amendment Nos. 1 through 6 which shall apply to the continued operation of the Boardman Plant. For purposes of design and construction, the provisions of the

Agreement, as amended by Amendment Nos. 1 through 6, except as specifically amended by this Amendment No. 8, shall remain in effect. [Amendment No. 8]

- B. This Agreement certifies that, to the extent authorized by State law and those warranties and conditions set forth herein, the State approves the construction and operation of the Boardman Plant in the manner described in PGE's site certificate application dated February 28, 1973, as amended, this Agreement, the record of the administrative hearings held pursuant to ORS 453.305 (1974), and Amendment Nos. 1 through 8 to this Agreement. This approval by the State binds the State and all counties, cities and political subdivisions in the State as to the approval of the site and the construction and operation of the Boardman Plant, subject only to conditions of this Agreement. Each agency that issues a permit, license, or certificate shall continue to exercise enforcement authority over such permit, license or certificate. [Amendment No. 8]
- C. PGE, by executing this Agreement, expressly waives any contest, jurisdictional or otherwise, as to the applicability of future state law pursuant to Section IV.A.1. below, except contests based upon violations of the Constitutions of the United States or the State of Oregon.

II. BOARDMAN SITE AND PLANT DESCRIPTION

A. Site Description

1. The site at, on, and in which the Boardman Plant is constructed consists of:
 - (a) The approximately 5,800 acres of land in Morrow County, Oregon, within the boundary described in the "Boardman Site Certificate

Land Description” and as “Boardman Site Boundary” on Figure 2, both attached hereto and by this reference incorporated herein.

[Amendment No. 8]

(b) The locations in Morrow County, Oregon, of the following major associated facilities as shown on the attached Figure 1: Carty Reservoir, transmission line rights-of-way, access road, pumping plant, makeup water pipeline, barge unloading facility, dewatering flow easement, and railroad spur. These locations may be adjusted as reasonable or necessary because of physical conditions.

2. The total amount of Class I, II, III, IV, V, and VI agricultural land (according to U.S. Soil Conservation Service Classifications) removed from potential productive capability by construction of the Boardman Plant and associated facilities shall not exceed 9,000 acres.

B. Boardman Plant and Associated Facilities Descriptions

The Boardman Plant consists of the following:

1. A power plant using a conventional boiler fueled by coal. The unit has a nominal net electric capacity of 550 megawatts where nominal means plus or minus 50 megawatts.

2. The cooling reservoir, transmission lines, intake structure, road and rail access, pipelines, barge basin and dewatering flowage as described below:

(a) The cooling reservoir, Carty Reservoir, having a surface area of approximately 5,000 acres and a maximum pool elevation of 677 feet MSL.

- (b) The transmission lines, consisting of three single-circuit 500-kV transmission lines and one 230-kV transmission line.
- (c) A pumping plant on the Columbia River to supply water for reservoir filling and makeup water requirements.
- (d) An extension of Tower Road for personnel and equipment access to the plant.
- (e) A railroad spur line from the existing UPRR tracks to the site for construction access and fuel transport.
- (f) A pipeline from the pumping plant on the Columbia River to the reservoir.
- (g) A barge basin for unloading of large equipment transported to the site by barge for construction.
- (h) A Dewatering Flowage Easement down Sixmile Canyon from the West Dam of the reservoir to the Columbia River.

III. WARRANTIES

In consideration of the execution of this Certification Agreement by the State pursuant to ORS 453.395(4) (1974), the following warranties are made:

A. Financial Ability

PGE warrants that it presently has or is reasonably assured of obtaining sufficient financial resources to operate the Boardman Plant, including the funds necessary to cover operating costs for the design lifetime of the plant, related fuel and waste processing and disposal costs, and the cost of permanently shutting the plant down and maintaining it in a safe condition.

B. Ability to Operate

PGE warrants that it has the ability to take those actions necessary to ensure that the Boardman Plant is operated in a manner consistent with the representations regarding effects on the public health, safety, and welfare contained in its site certificate application, as amended, and the terms and condition of this Agreement.

C. Protection of Public Health and Safety

PGE warrants that it will take those actions, including compliance with all applicable Federal Statutes, rules and regulations necessary to ensure that operation of the Boardman Plant poses no danger to the public health and safety.

IV. CONDITIONS

The following conditions are provided pursuant to the provisions of ORS 453.395(3) (1974):

A. State and Federal Law

1. PGE and the State shall abide by applicable state laws, including lawful administrative rules and regulations, and the rules of the Nuclear and Thermal Energy Council as were in effect on the date of execution of the original agreement. PGE may be required to comply with stricter state laws or rules of the Energy Facility Siting Council (Council) or other state agencies adopted subsequent to the execution of the original agreement upon a clear showing that compliance is necessary because of danger to the public health and safety. However, such rules may not require PGE to

use any equipment or procedure that would cause PGE to lose any Federally delegated permits required for operation of the plant.

2. Nothing in this Agreement shall relieve PGE from complying with requirements of Federal laws and regulations which may be applicable to construction and operation of the plant and associated facilities, and with the terms and conditions of any permits and licenses which may be issued to PGE by pertinent federal agencies.

B. Control of Site

PGE shall maintain control over the site and access thereto, whether by ownership, lease, easement or otherwise to:

1. Maintain the plant, Carty Reservoir, the associated transmission lines, barge unloading facility, pumping plant, makeup water pipeline, dewatering flow easement, access road, and railroad spur.
2. Regulate activities on the site as may be necessary to meet the conditions of this Agreement.
3. Assure the road and rail access to the plant necessary to the operation, monitoring and regulation of the plant and associated facilities.

C. Uses of the Site

1. Purpose

The site, as described in Section II.A.1, shall not be used for any purpose other than the production and transmission of electrical power. The Council hereby approves the following additional uses of the site, subject to the conditions contained herein:

- (a) Use of access road and transportation facilities by others in a manner which will not conflict with operation of the plant and associated facilities.
- (b) Use of the pumping plant, pipeline, or reservoir for purposes relating to irrigation.
- (c) Agricultural use in accordance with the site certificate application.
- (d) Residential use by plant operating personnel.
- (e) Recreational use; however, no long-term use (greater than 24 hours) shall be permitted.

2. Access

PGE shall permit public access to the site subject to limitations necessary for protection of public health, safety, and welfare, and protection of PGE and nearby landholder property. This shall include reasonable access during daylight hours to a point from which the plant can be viewed somewhere within the area designated in Figure 2 as "Boardman Site Boundary".

3. Fuel and Ash

- (a) PGE will notify the Oregon Department of Energy if coal shipments are received from sources outside the Powder River Basin or coal seams not previously used for the Boardman Plant. PGE will provide additional information upon a request from the Department.

- (b) Prior to unrestricted use of the site, the ash pile shall be stabilized in accordance with the applicable rules and regulations of the Oregon Department of Environmental Quality and the external gamma dose and radon emanation rate from the stabilized pile shall be measured and reported to the Oregon Department of Energy.

4. Test Firing of Biomass.

(a) Certificate holder is authorized to store green biomass, to process the biomass in a torrefaction unit, to store torrefied biomass, and to use the biomass as a fuel for the torrefaction unit and in test burns in the Boardman Plant consistent with certificate holder's Request for Amendment No. 9, and subject to the restrictions set forth in this Section IV.C.4.

(b) Storage of biomass and operation of the torrefaciton unit (including dryer) within the Boardman Plant site shall occur only in the areas shown on Attachment 1 to certificate holder's Request for Ninth Amendment

(c) If the torrefaction unit is installed and operated on the Boardman Plant site, before beginning construction and operation of the torrefaction unit and dryer, certificate holder shall notify the Department of the identity and qualifications of the contractor selected

(d) If the torrefaction unit is installed and operated on the Boardman Plant site, certificate holder shall provide notice in writing to the Department when the torrefaction unit is installed on the site and when it is removed. The torrefaction unit shall be removed from the Boardman Plant site not later than one month after completion of the test burns

(e) The certificate holder must obtain all necessary federal, state and local permits or approvals required for construction and operation of the torrefaction unit and related equipment, or ensure its contractors obtain the necessary federal, state and local permits or approvals. The certificate holder must contractually require all contractors involved to comply with the applicable laws, regulations and terms of the site certificate. Such contractual provisions do not relieve the certificate holder of responsibility under the site certificate

(f) Certificate holder shall provide written notice to the Department and Oregon Department of Environmental Quality 15 days in advance of the -it begins 24-hour 24- hour test burn of biomass

(g) PGE shall provide written notice to the Department when it begins the co-firing of biomass

(h) PGE shall complete all test burns within two years after the first test burn

(i) Any green or torrefied biomass remaining on the site upon completion of the test burns shall be removed from the site [amendment 9]

D. Reservoirs and Hydraulic Structures

1. No changes shall be made to the final designs, specifications, and construction methods for the reservoir and appurtenant hydraulic structures without the concurrence of the Water Resources Department.
2. Reservoir make-up pumping facilities shall be designed and operated to the extent practicable such that pumping power consumption is limited during daily and seasonal periods of peak power usage.
3. The proposed cooling reservoir will be constructed in two stages. The initial stage of development will involve the use of a temporary saddle dam on the east end of a partial reservoir of approximately 1500 acres. When future power plants are constructed at the site, the reservoir will be expanded to its full size as required to provide additional cooling capacity. Until completion of the pumping plant identified in Items II.B.2.(c) and (f), water for filling and makeup for the partial reservoir will be provided by Boeing Agri-Industrial from its Willow Creek Cove pumping station. The water will be pumped into the reservoir through an existing irrigation pipeline. Upon completion of the full reservoir, water for filling, and makeup will be supplied by a pumping plant on the Columbia River.

4. If provisions are instituted whereby some other person or organization utilizes site reservoir storage capacity for irrigation, PGE shall advise the Council of the details of such provisions, including:
 - (a) The financial obligations or arrangements involved in the provision.
 - (b) The consequences if for some reason storage capacity becomes unavailable to the other user.
 - (c) The arrangements that exist between PGE and the other user regarding pumpage of water to the reservoir at various times of the year and the limits on the amount of water pumped out of the reservoir.

E. Barge Unloading Facilities

PGE shall submit a description of any barge unloading facility planned to the Council for information. In addition, PGE shall consult with the Morrow County Planning Commission to determine methods by which the unloading facilities could be made available for use by others.

F. Water Quality

1. Except in the event that it becomes necessary to perform maintenance or repair work on Carty Reservoir, there shall be no discharge of water from the plant or associated facilities to the Columbia River.
2. Carty Reservoir may be used for direct dissipation of waste heat from the plant by discharge of cooling water directly to the reservoir.

3. To protect wildlife and to enhance uses of water other than for condenser cooling, concentrations of chemicals in the reservoir in any form shall be limited as follows:

<u>Constituent</u>	<u>Maximum Allowable Reservoir Concentration</u>	
Chloride	100	mg/l
Sulfate	200	mg/l
Sodium	1,000	mg/l
Arsenic	1	mg/l
Boron	0.5	mg/l
Copper	0.1	mg/l
Cadmium	0.01	mg/l
Calcium	500	mg/l
Chromium	0.05	mg/l
Magnesium	250	mg/l
Bicarbonate Alkalinity	500	mg/l
Fluoride	1	mg/l
Nitrate	200	mg/l
Total Dissolved Solids	1,000	mg/l
Mercury	0.01	mg/l
Zinc	0.1	mg/l
pH	No limit	mg/l
Sodium Absorption Ratio	6.0 max.	mg/l

4. PGE shall comply with the pertinent industry standards for control of surface-water runoff during construction and shall take whatever actions

are necessary to correct and avoid run-off which detrimentally affects water quality.

G. Historic and Archaeological Sites

In development of the site, PGE shall take no action which would adversely affect preservation of Oregon Trail traces.

H. Approvals

The following approvals, permits, licenses or certificates by governmental agencies are considered necessary to construction or operation of the plant.

1. State Land Board

Permit to remove material from the Columbia River for the construction of an intake/pumping facility and a barge slip.

2. Department of Geology and Mineral Industries

Surface mining permit for excavation disturbance and removal of land surface other than onsite construction.

3. Oregon Water Resources Department

(a) Approval of plans, specifications and construction methods for construction of dams on the northwest and north sides of Carty Reservoir.

(b) Permit for the construction of Carty Reservoir and storage therein of water from the Columbia River.

(c) Permit for appropriation of water from Well 3N24-33 and others as required.

- (d) Permit for the appropriation of Columbia River water for power plant construction, landscape planting, fire protection and domestic use at the plant site and for cooling water for the plant including makeup, evaporation and seepage losses.

4. State Highway Division

- (a) Permit to install intake water piping, conduit for power and communication cables under State Highway No. 2 (I-84).
- (b) Permits for heavy loads on State highways and roads.
- (c) Permits to install overhead power line crossing of State Highway No. 2 (I-84) and State Highway No. 52 (Route 74).
- (d) Permit for widening and channelization of State Highway No. 2 (I-84) to provide deceleration lanes at Tower Road Junction, if required.

5. Public Utility Commission

Approval for railroad spur to cross State Highway No. 2 (I-84).

6. Oregon Department of Fish and Wildlife

- (a) Approval that the intake/pumping facility is so designed as to protect sport fish resources.
- (b) Permit to collect wild animals, birds, amphibians, reptiles and game fish upon and in the vicinity of the site for ecological studies.
- (c) Approval that the intake/pumping facility is so designed as to protect commercial fish resource.

- (d) Permit for the use of underwater explosives in the Columbia River during construction of the barge slip and the intake/pumping facility.

7. Department of Environmental Quality

- (a) Approval of the waste discharge effects during the construction of the plant.
- (b) Approval of the design and construction drawings of the sewage stabilization pond to be used for construction and plant operation.
- (c) Solid waste disposal permit for the onsite disposal of ash or other solid waste.
- (d) State waste discharge permit covering disposal of both cooling and process waters and domestic sewage.
- (e) Air contaminant discharge permit for operation of the Boardman Plant.

8. State Health Division

Approval of the design of the sanitary water system.

9. Department of Consumer and Business Services

- (a) Approval of Pressure Vessel and Piping Code inspection procedures in compliance with the Oregon Boiler and Pressure Vessel Law.
- (b) Approval of applicable construction drawings by the State Fire Marshal.
- (c) Building permits as required.

10. Morrow County

- (a) Permit for heavy loads on country roads.
- (b) Conditional use permit or zone change, as necessary.

It is agreed by the parties that future identification of additional approvals, permits, licenses or certificates necessary to construction or operation of the plant would constitute a “future unforeseen development” necessitating an amendment of this Agreement pursuant to Section V hereof. In this event, the agency seeking to require such an approval, permit, license or certificate shall substantiate the necessity for it, and the reason it was not identified in the site certification agreement.

V. AMENDMENT OF SITE CERTIFICATION AGREEMENT

A. Amendments Affecting Public Health, Safety or Welfare

PGE and the State recognize a need to provide a means of amending this Agreement. Therefore, the parties agree that in the event future unforeseen developments cause the construction or operation of the plant or associated facilities to present a danger to the public health, safety, or welfare, this Agreement may be amended by further written agreement, executed after compliance with the procedures of 1. through 5. below.

- 1. Either PGE or the Council Staff may propose a corrective amendment.
The proposal shall set forth the amendment verbatim, together with a statement of the reasons therefor.
- 2. The Council shall distribute the proposed amendment to the appropriate state agencies, the county advisory group and to all parties to the

proceeding, requesting comments and recommendations on the proposed amendment within 30 days of the date of distribution.

3. The Council shall hold a public hearing on the proposed amendment within 90 days after distribution of the proposed amendment.
4. At the conclusion of the hearing and in no case more than 120 days after the proposed amendment was distributed, the Council shall, based on its findings as to danger to the public health, safety, and welfare, approve the proposed amendment by an affirmative vote of not less than four members of the Council. Rejection or approval of a proposed amendment shall be subject to judicial review pursuant to the provisions of ORS Chapter 183.
5. After expiration of the appeal period authorized by ORS 183.480 or after an appeal is completed, the proposed amendment approved by the Council shall be executed by the Council Chair.

B. Amendments Not Affecting Public Health, Safety or Welfare

Where PGE and the Council staff agree that it is desirable to amend this site certificate for reasons other than set forth in A. of this section either may file with the Council an application for an amendment to the Site Certificate Agreement which application shall state the necessity and reasons therefor. The Council may grant such application without further proceedings.

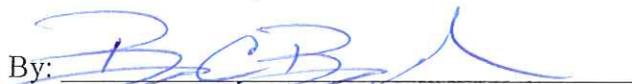
VI. SUCCESSORS AND ASSIGNS

This Agreement is binding upon PGE and any co-owners, partners or joint venturers of PGE in the construction and operation of the plant and associated facilities, and upon any

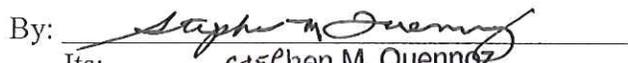
successors in interest to or assignees of either PGE or any co-owner, partner or joint venturer.

IN WITNESS WHEREOF, this Amendment Number 9 to the Site Certificate Agreement has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council, and Portland General Electric Company as below subscribed this 3 day of May, 2013.

STATE OF OREGON
ENERGY FACILITY SITING COUNCIL

By: 
Barry Beyeler, Acting Chair

PORTLAND GENERAL ELECTRIC COMPANY 

By: 
Its: Stephen M. Quennoz
VP Power Supply &
Generation