Amendment Determination Request
for the
Carty Generating Station
Site Certificate

Submitted to:

Oregon Department of Energy

September 16, 2020

Prepared by:

Portland General Electric Company

121 SW Salmon St.
3WTC-0403
Portland, OR 97204

This page intentionally left blank

Table of Contents

Tables

Figures

Acronyms and Abbreviations

BCP	Boardman Coal Plant
CGS	Carty Generating Station
CTG	combustion turbine generator
CUP	Conditional Use Permit
DEQ	Department of Environmental Quality
EFU	Essential Farm Use
gpd	gallons per day
MG	General Industrial
GCZO	Gilliam County Zoning Ordinance
kV	kilovolt
kVA	kilovolt-ampere
MW	megawatt
MCZO	Morrow County Zoning Ordinance
NPDES	National Pollutant Discharge Elimination System
OAR	Oregon Administrative Rule
DOE	Oregon Department of Energy
ODFW	Oregon Department of Fish and Wildlife
PV	photovoltaic
PGE	Portland General Electric Company
RFA	Request for Amendment
ROW	right of way
SHPO	State Historic Preservation Office
WPCF	Water Pollution Control Facility
WHMMP	Wildlife and Habitat Mitigation and Monitoring Plan

1 Introduction

On June 29, 2012, the Energy Facility Siting Council (Council) issued a site certificate to Portland General Electric Company (PGE) for the Carty Generating Station (CGS, or "facility")[1]. The site certificate authorized the construction and operation of two natural gas combined-cycle generating units (Unit 1 and Unit 2) and related or supporting facilities. Unit 1 and its related or supporting facilities were constructed and placed in service in 2016.

The 2012 Site Certificate for CGS authorized the shared use of several existing Boardman Coal Plant (BCP) facilities that are currently interconnected with CGS. These include the sanitary waste infrastructure, Carty Reservoir (including raw water intake system), Water Discharge Channel, Boeing Well (potable water source), and the existing 17-mile-long, 500 kV Grassland to Slatt transmission line to connect to the grid. The BCP will cease operations by December 31, 2020. After BCP ceases to operate, the shared facilities and other identified BCP facilities would exist only to serve CGS and therefore must be added to the Site Certificate for CGS as "related or supporting facilities" so they may continue to be used by CGS. In preparing a Request for Amendment No. 2 (RFA2), PGE is taking the opportunity to also add the construction of new facilities at CGS and existing facilities authorized under the Site Certificate for BCP to the Site Certificate for BCP.

PGE is submitting Request for Amendment No. 2 (RFA2) to:

1. Modify the Site Boundary to release approximately 378 acres of agricultural lands and incorporate existing facilities currently authorized under the Site Certificate for BCP (Figure 1);
2. Incorporate existing common infrastructure shared by BCP and CGS into the Second Amended Site Certificate for CGS (Figure 2a and Figure 2b);
3. Incorporate existing facilities currently authorized under the Site Certificate for BCP into the Site Certificate for CGS (Figure 2a and Figure 2b);
4. Authorize construction and operation of new minor infrastructure within the existing Site Boundary for CGS (Figure 3);
5. Authorize construction and operation of new infrastructure within and the amended Site Boundary for CGS (Figure 3);
6. Revise the existing Oregon Department of Environmental Quality (DEQ) Water Pollution Control Facility (WPCF) permit (Permit Number 100189) to better reflect operational conditions at CGS (see Attachment 2 of RFA2);
7. Update the existing Site Certificate for CGS to include the correct location of the phone and data highway systems; and,
8. Revise existing site certificate conditions as needed (*see* Attachment 1 of RFA2).

[1] Site Certificate for the Carty Generating Station. 2012. Available at: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/CGS_site_certificate_070212.pdf

2 Amendment Determination Request

As the certificate holder for CGS, PGE requests a written determination as to whether RFA2 justifies review under the Type B review process provided by Oregon Administrative Rule (OAR) 345-027-0357(3).

OAR 345-027-0357(8) provides factors the Oregon Department of Energy (DOE) may consider when considering whether a Type B process is justified. Specifically, the DOE may consider factors, including but not limited to:

(a) the complexity of the proposed change;

(b) the anticipated level of public interest in the proposed change;

(c) the anticipated level of interest by reviewing agencies;

(d) the likelihood of significant adverse impact; and

(e) the type and amount of mitigation required, if any.

The following sections describe the existing CGS, proposed changes considered in RFA2, and PGE's evaluation demonstrating that the proposed changes justify review under the DOE's Type B review process.

3 Description of the Existing Facility

This section describes the location of CGS, the limits of the current Site Boundary, the major components at CGS (including related or supporting facilities), and the existing facilities currently shared by CGS and BCP (Figure2a and Figure 2b). The CGS includes the authorized, but not yet constructed, Carty Solar Farm, a 50-megawatt (MW) PV solar generating unit authorized by the Council in the First Amended Site Certificate for CGS issued on December 14, 2018, and executed on February 4, 2019. Per Condition 4.1 (ii), PGE has until February 4, 2022, to begin construction of the Carty Solar Farm unless a request for extension is submitted.

3.1 Location and Current Site Boundary

The CGS is located in Morrow County, Oregon, southwest of the City of Boardman near the Carty Reservoir and adjacent to the existing BCP. Unit 1 and associated related or supporting facilities, including the 500 kV Unit 1 to Grassland Switchyard transmission line, the Grassland Switchyard, and permanent access roads, are located in Township 3 North, Range 24 East, Sections 32 and 33. The proposed Carty Solar Farm, if constructed, will be located south and southeast of the Carty Reservoir in Township 2 North, Range 24 East, Sections 2, 3, 10, and 11. Carty Solar Farm's related or supporting facilities, including transmission lines and temporary construction areas, will be located in the sections mentioned above and Township 3 North, Range 24 East, Sections 34 and 35.

As defined by OAR 345-001-0010, the Site Boundary is "…the perimeter of the site of the energy facility, its related or supporting facilities, all temporary staging areas, and all corridors and

micrositing corridors proposed by the applicant." The current Site Boundary for CGS encompasses approximately 1,581 acres and is shown in Figure 1.

3.2 Carty Generating Station

This section describes the location of CGS, the limits of the current Site Boundary, the major components at CGS (including related or supporting facilities), and the existing facilities currently shared by CGS and BCP. The CGS includes the authorized, but not yet constructed, Carty Solar Farm, a 50-megawatt (MW) PV solar generating unit authorized by the Council in the First Amended Site Certificate for CGS issued on December 14, 2018 and executed on February 4, 2019. Per Condition 4.1(ii), PGE has until February 4, 2022, to begin construction of the Carty Solar Farm unless a request for extension is submitted.

3.3 Location and Current Site Boundary

The CGS is located in Morrow County, Oregon, southwest of the City of Boardman near the Carty Reservoir and adjacent to the existing BCP. Unit 1 and associated related or supporting facilities, including the 500 kV Unit 1 to Grassland Switchyard transmission line, the Grassland Switchyard, and permanent access roads, are located in Township 3 North, Range 24 East, Sections 32 and 33. The proposed Carty Solar Farm, if constructed, will be located south and southeast of the Carty Reservoir in Township 2 North, Range 24 East, Sections 2, 3, 10, and 11. Carty Solar Farm's related or supporting facilities, including transmission lines and temporary construction areas, will be located in the sections mentioned above and Township 3 North, Range 24 East, Sections 34 and 35.

As defined by OAR 345-001-0010, the Site Boundary is "…the perimeter of the site of the energy facility, its related or supporting facilities, all temporary staging areas, and all corridors and micrositing corridors proposed by the applicant." The current Site Boundary for CGS encompasses approximately 1,581 acres and is shown in Figure 1.

3.4 Carty Generating Station

Unit 1 of CGS is a natural gas-fueled, combined-cycle, electric power generating plant capable of generating up to 450 MW of electrical power. The combined-cycle generating unit consists of one high-efficiency combustion turbine generator (CTG), a heat recovery steam generator, a steam turbine generator, and a cooling tower. A natural gas-fueled auxiliary boiler supplies steam when none is available from the heat recovery steam generator to start the CTG or to maintain the plant in a ready-to-start condition.

In addition to Unit 1, CGS also consists of a not-yet-constructed, 50 MW solar PV electrical power generating unit and associated transmission. The Carty Solar Farm would occupy a 315-acre site located south of the Carty Reservoir (Figure 2a). Electrical power produced by the Carty Solar Farm would be collected and routed via a new 34.5 kV transmission line to one of three interconnection options located north of the Carty Reservoir. Five potential transmission line routes from the Carty Solar Farm to the three interconnection options are currently permitted under the First Amended Site Certificate for CGS (*see* Figure 2a for interconnection options; *see* Figure B-4, Sheet 1 of RFA1

for transmission line routes[2]). Each route would be of the same approximate design and would be approximately 2 to 3 miles long, depending on the route selected. If an interconnection to the Grassland Switchyard is selected, the switchyard would be enlarged to 15 acres, as approved in the original Site Certificate and the First Amended Site Certificate for CGS.

The CGS currently includes the following related or supporting facilities:

- Grassland Switchyard
- 500 kV Unit 1 to Grassland Switchyard transmission line
- 34.5 kV backup transmission line
- 7.2 kV backup transmission line
- 4.2 kV station service line
- Interconnecting water pipelines
- Cooling tower
- Liquid storage facilities
- Accessory buildings
- Communication lines
- Access roads

A control and administrative building provides space for plant controls and offices for plant personnel for Unit 1 and the potential Carty Solar Farm.

CGS is interconnected with BCP for use of the following infrastructure permitted under the Site Certificate for BCP: Carty Reservoir, including intake and discharge facilities; sanitary waste infrastructure; potable water supply; and transmission infrastructure. Interconnected transmission infrastructure includes the 500 kV Grassland to Slatt transmission line, the 230 kV BCP to Dalreed transmission line, and the 34.5 kV BCP to railroad crossing at Tower Road transmission line; the 7.2 kV distribution line connecting the power block to the construction substation; the 12.5 kV distribution line connecting construction substation to the Boeing Well pump; and the 480-volt underground distribution line connecting the 34.5 kV transmission line to the Carty Reservoir seepage pumps.

A description of major components, structures, and systems of each related or supporting facility that is part of CGS per the Site Certificate for CGS is provided in the following subsections.

3.4.1 Grassland Switchyard

The Grassland Switchyard is a 500 kV, alternating current, open-air switchyard located west of CGS (Figure 2a). The switchyard consists of an 8.5-acre leveled and graveled area surrounded by a security fence. The switchyard was approved with a 15-acre permanent disturbance footprint in

[2] Request for Amendment No. 1 of the Carty Generating Station. 2018. Available at: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/2018-02-21-CGS-AMD1-ExAE.PDF

the original Site Certificate and may be expanded to that size depending on the interconnection needs of the Carty Solar Farm. The switchyard includes 500 kV circuit breakers and disconnect switches to allow for clearing faults on the connected transmission lines and for maintenance of the circuit breakers and transmission lines. An additional small building provides a controlled environment for protective relaying and communication equipment.

3.4.2 500 kV Unit 1 to Grassland Switchyard Transmission Line

Generator transformers at CGS step up the voltage produced by Unit 1 to 500 kV. An existing, approximately 1-mile-long 500 kV transmission line mounted on four steel lattice towers connects the generator transformers to the 500 kV Grassland Switchyard (Figure 2a). The towers are 100 to 150 feet tall and are spaced approximately 800 to 1,700 feet apart. Electricity from CGS is connected to the grid via the 17-mile-long, 500 kV Grassland to Slatt transmission line. The Grassland to Slatt transmission line is mounted on steel lattice towers for its entire length and is currently included in the Site Certificate for BCP, not the Site Certificate for CGS.

3.4.3 On-Site Power Transmission Lines

Three additional existing transmission lines provide backup and station service power to CGS (Figure 2a and Figure 2b):

- A 4.2 kV station service line extends approximately 1 mile from CGS to the Grassland Switchyard. For most of its length, this line is mounted on wood poles. However, the line runs underground for approximately 750 feet prior to entering the Grassland Switchyard to avoid clearance conflicts with the 230 kV BCP to Dalreed transmission line. This line provides power to the Grassland Switchyard from CGS.
- A 7.2 kV backup power line extends approximately 0.5 mile from BCP to CGS. This line runs underground approximately 0.10 mile north of BCP; the remainder of the line is mounted on wood poles.
- A 34.5 kV line (referred to as the Grassland backup station service line) provides backup power to Grassland Switchyard via an approximately 800-foot underground line extending west and then north from the transformer within Grassland Switchyard, where it connects to the existing 34.5 kV line permitted under the Site Certificate for BCP.

3.4.4 Interconnecting Pipelines

Several pipelines connect CGS with BCP to access the following shared infrastructure: the Carty Reservoir raw water intake structure; the wastewater discharge structure for discharge to Carty Reservoir; and the sanitary sewer (Figure 2a and Figure 2b). There are four categories of water sources and discharges that serve CGS: raw water/fire water, wastewater, potable water, and sanitary sewer.

Raw Water/Fire Water

Raw water from the Carty Reservoir is withdrawn via a single intake structure and is used for two purposes: recirculation water and service water (Figure 2a and 2b). Independent channels and pumps for recirculation water and service water are located inside the Raw Water Intake Building.

Recirculation water is solely used by BCP and is not considered a shared facility for CGS. Service water is taken in through a separate channel with a traveling screen and enters a wet well. CGS's raw water intake is connected to this wet well. Raw water from this intake is also used at CGS for fire water. The CGS intake from the wet well is currently permitted under the Site Certificate for CGS, but the raw water intake from the Carty Reservoir, traveling screen, and wet well are currently permitted under the Site Certificate for BCP.

Wastewater

CGS process wastewater and plant drainage wastewater flows are discharged into holding ponds, which can provide 7 days of holding capacity (if needed for discharge line maintenance or some other event preventing direct discharge). From the holding ponds, wastewater is discharged via an 8-inch-diameter pipeline into BCP's Water Discharge Channel prior to entering Carty Reservoir (Figure 2b). The holding ponds and 8-inch-diameter discharge pipe are currently permitted under the Site Certificate for CGS, but the Water Discharge Channel is currently permitted under the Site Certificate for BCP.

Potable Water

Potable water for drinking fountains, showers (emergency and lavatory), sinks, and flushing of lavatory fixtures comes from the Boeing Well. The Boeing Well is a groundwater extraction well located just south of CGS and northwest of BCP (Figure 2a and Figure 2b). The well is 600 feet deep with a 30-horsepower pump hung at around 440 feet below ground surface. The well fills a holding tank within CGS prior to direct distribution to the plant services building. The CGS holding tank is piped directly from the Boeing Well discharge pipe and is only filled when the well is turned on to fill the BCP water tank. The CGS potable water system has a control valve to only allow water to flow in when needed. If water is needed by CGS, but not BCP, the well pump can be manually started and stopped via a hand control on the domestic water pump house control panel. The Boeing Well pump drive motor is powered from a 150-kilovolt-ampere (kVA) 12470-480/277-volt distribution transformer. This transformer is connected via a 12.5 kV underground distribution line to the construction substation (Figure 2a and Figure 2b). The construction substation, in turn, derives power from a 7.2 kV underground power distribution line coming from BCP.

Sanitary Sewer

Sanitary sewer flows at CGS are solely from plant lavatories, sinks, and bathroom showers used by plant personnel and are directly discharged to the sewage lagoons that also serve BCP via an independent sewer lift station. There are three existing sewage lagoons: The South Lagoon and Middle Lagoon (both lined), and the North Lagoon (unlined) (Figure 2a and Figure 2b). The South and Middle Lagoons can also be made common by a gated pipe through the separating dike. The only connection between the lined lagoons and the unlined lagoon is overflow through a chlorinating weir at the northeast corner of the Middle Lagoon. No overflow has occurred since BCP construction was completed in 1980. The original clay liners in the South and Middle Lagoons were replaced with new synthetic liners in the fall of 2014. The independent sewer lift station is permitted under the Site Certificate for CGS, but the sewage lagoons are permitted under the Site Certificate for BCP. Sanitary sewer discharges from CGS and BCP to the sewage lagoons are both permitted under WPCF permit number 100189.

3.5 Cooling Tower

The cooling tower at CGS exhausts excess heat from the power generation process (Figure 2a and Figure2b). The cooling tower consists of a structure to contain a water-cooling medium, with exhaust fans located within an open-top, bell-shaped housing that pulls air under and through the water-cooling medium. The cooling tower is approximately 50 feet tall. The mechanical-draft wet cooling tower serves the combined cycle unit of CGS.

3.6 Liquid Storage Facilities

Liquid fuel is not stored on CGS. Anhydrous ammonia, used for emissions control, is stored in steel storage tanks with secondary containment. Other liquid chemicals such as sulfuric acid (used for pH control) and sodium hypochlorite and sodium bromide (used as biocides in cooling tower water) are stored in tanks or totes with secondary containment. Small-quantity liquid chemicals such as cleaners and lubricants are stored within on-site accessory buildings.

3.7 Accessory Buildings

Accessory buildings on CGS house boiler feed pumps, chemical feed equipment, water treatment equipment, and other equipment requiring protection from weather or noise containment. Accessory buildings common to CGS and the proposed Carty Solar Farm include warehouse and administration areas.

3.8 Communication Lines

In the Application for Site Certificate, the communication lines supporting CGS were expected to originate from BCP and connect to CGS. During construction, the location of the lines was modified to originate from an existing Century Link vault near the northwest corner of the BCP lined evaporation ponds, run down the dirt access road, along Tower Road, and then into CGS.

3.9 Access Roads

A paved loop road, approximately 24 feet wide and 2,100 feet long, connects with Tower Road at both ends of the loop to serve normal truck and operator vehicle traffic for Unit 1. This loop road has spur roads leading to individual buildings and areas that require access.

4 Description of Proposed Changes and Certificate Holder's Evaluation

This section evaluates changes described in RFA2 with respect to factors described in OAR 345-027-0357(8). In evaluating these factors, the following definitions were used:

- Complex: Not easy to understand or explain: not simple. A proposed change to the components of an energy facility and its related or supporting facilities may be considered complex even if the proposed change is not technologically complex as there may be complexity in conducting the regulatory applicability review.

- Significant Adverse Impact: As defined in OAR 345-001-0010 (52), significant means "having an important consequence, either alone or in combination with other factors, based upon the magnitude and likelihood of the impact on the affected human population or natural resources, or on the importance of the natural resource affected, considering the context of the action or impact, its intensity and the degree to which possible impacts are caused by the proposed action. Nothing in this definition is intended to require a statistical analysis of the magnitude or likelihood of a particular impact."

4.1 Modify the Site Boundary for Carty Generation Station

As described in Section 5.1.1 of the RFA2 for CGS, PGE is requesting an amendment to the CGS Site Boundary to incorporate related or supporting facilities that are currently located outside of the existing Site Boundary (Figure 1). These related or supporting facilities are currently authorized under the Site Certificate for the BCP and include the following existing facilities: 500 kV Grassland to Slatt transmission line, 230 kV BCP to Dalreed transmission line, 34.5 kV BCP to the railroad crossing at Tower Road transmission line, Carty Reservoir, portions of the Water Discharge Channel and raw water intake structure not already included in the CGS Site Boundary, and sewage lagoons. Addition of the 500kV Grassland to Slatt and 230 kV BCP to Dalreed transmission lines would extend the CGS facility Site Boundary to also include Gilliam County. The Site Boundary would also be modified to remove agricultural lands from the western portion of the current Site Boundary because this area is no longer being considered for future facility development related to CGS. The RFA2 Site Boundary would encompass approximately 4,611 acres.

PGE is requesting an amendment to the CGS Site Boundary to incorporate related or supporting facilities that are currently located outside of the existing Site Boundary. These related or supporting facilities are currently authorized under the Site Certificate for BCP and include the following existing facilities: 500 kV Grassland to Slatt transmission line, 230 kV BCP to Dalreed transmission line, 34.5 kV BCP to the railroad crossing at Tower Road transmission line, Carty Reservoir (and associated pumping facilities and seepage collection systems), portions of the Water Discharge Channel, and raw water intake structure not already included in the CGS Site Boundary, sewage lagoons, evaporation ponds, irrigation pump station, and a 34.5 kV underground transmission line connecting an irrigation pump station on the shore of the Carty Reservoir to an existing PacifiCorp transmission line. The addition of the 500 kV Grassland to Slatt and the 230 kV BCP to Dalreed transmission lines would expand the CGS Site Boundary to also include Gilliam County. The Site Boundary would also be modified to include the land area occupied by the new Carty substation and associated distribution lines from the new substation to the existing construction substation and CGS back-up power; and remove agricultural lands from the western portion of the current Site Boundary because those areas are no longer being considered for future facility development related to CGS. The Site Boundary would encompass approximately 4,997 acres, an increase of 3,414 acres compared to the existing Site Boundary. To address this change, PGE proposes to modify Site Certificate Condition 2.1 to indicate the inclusion of Gilliam County.

4.1.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Changes to the Site Boundary would have no new or different effects on the operation of CGS. No facilities associated with the operation of CGS are located on agricultural lands proposed for removal from the Site Boundary for CGS. There would be no change in use of the areas proposed in the Site Boundary change, and therefore anticipated impact to surrounding property owners/users would be negligible. The Site Boundary change would add new areas subject to the Council's siting standards and other laws and standards pursuant to the Second Amended Site Certificate for CGS; however, no land use permits are required for this change and no approvals are needed for this transfer, outside of those required from DOE.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the modification to the Site Boundary for CGS is expected to be minor, as the changes are due to the transfer of authorization to operate existing facilities from BCP to CGS, or the reduction of the existing footprint of the Site Boundary to release areas currently used for agriculture. Land use in these areas will not change, and therefore neighboring landowners/users will not be impacted by this change.

Anticipated Level of Interest by Reviewing Agencies

It is expected that Oregon Department of Fish and Wildlife (ODFW) and the State Historic Preservation Office (SHPO) will have interest in the portions of the expanded site boundary that coincide with the existing 500 kV BCP to Slatt and the existing 230 kV BCP to Dalreed (and the co-located 34.5 kV BCP to the railroad crossing at Tower Road) transmission lines. As described in Section 4.2.2, below, PGE proposes to apply site certificate conditions 10.1-10.21, with modification to Site Certificate 10.1 to incorporate these new areas into ongoing habitat and threatened and endangered species surveys.

The transfer of Carty Reservoir from the Site Certificate for BCP to CGS and incorporation of that facility in the site boundary for CGS is expected be of interest to the Department of Environmental Quality (DEQ) and ODFW. As discussed further in Section 4.2.1, PGE coordinated with DEQ on revisions to the WPCF to more accurately reflect the operating conditions of CGS. To address ODFW's concerns, PGE proposes a new Site Certificate Condition committing PGE to operating Carty Reservoir at an elevation no lower than an annual average of 665 feet mean sea level (MSL) (See Site Certificate Condition 10.40, as modified for RFA2). See discussion below for Carty Reservoir for additional detail.

Likelihood of Significant Adverse Impact

Modification to the Site Boundary for CGS will not result in significant impacts because this action addresses existing related or supporting facilities already authorized and operating in compliance with the Site Certificate for BCP. New related or supporting facilities considered in RFA2 and associated with the proposed modification of the Site Boundary for CGS are located in previously disturbed areas within the Site Boundary for BCP.

Type and Amount of Mitigation

No new mitigation is proposed as part of the proposed changes to the site boundary for CGS.

4.2 Incorporate Infrastructure Authorized Under the Site Certificate for Boardman Coal Plant

As described in Sections 5.1 of RFA2, PGE proposes to incorporate existing related or supporting facilities currently authorized under the Site Certificate for BCP into the Site Certificate for CGS. This infrastructure includes related or supporting facilities currently shared with CGS, and those used solely by BCP. Because the existing BCP components that are requested to be included in the Second Amended Site Certificate for CGS under this RFA2 do not constitute a change in use, they also do not require any new land use approvals or an amendment to the existing CUP.

4.2.1 Carty Reservoir

As described in Section 5.1.2 of the RFA2 for CGS, PGE is requesting an amendment to transfer authorization of Carty Reservoir, including its operation and maintenance, into the Site Certificate for CGS (Figure 2a). This facility is currently permitted under the Site Certificate for BCP, but also receives wastewater from CGS. It also serves as the non-potable water source for both BCP and CGS and provides wildlife habitat and irrigation water for nearby farmland. Dams are assigned a hazard rating based on downstream hazard to people and property, not on the condition of the dam; the Carty Reservoir dam is classified as a significant hazard dam and as such is inspected by the Oregon Water Resources Department every three years.

4.2.1.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Adding Carty Reservoir to the Site Certificate for CGS will not alter the operation or current permitted uses of the reservoir by CGS. Although Carty Reservoir was not included as a related or supporting facility in the ASC, CGS impact to the reservoir was evaluated and taken into consideration when the WPCF permit was issued by DEQ; therefore, the WPCF already has conditions related to CGS use of Carty Reservoir that will continue to apply to CGS and no new conditions pertaining to water quality in Carty Reservoir would be applied to the Second Amended Site Certificate for CGS. PGE already performs all necessary physical maintenance of the reservoir as part of the BCP and adding the Carty Reservoir as a related or supporting facility to CGS does not change or add any additional requirements. For these reasons, the proposed change is not considered complex.

Anticipated Level of Public Interest in the Proposed Change

Incorporating Carty Reservoir into the Site Certificate for CGS is largely an administrative exercise, as no operational or permitting changes would occur. Still, public interest in proposed changes could exist due to the reservoir's association with BCP, and the relationship of proposed changes to the closure, decommissioning, and demolition of that facility. As documented in the Special Final Order No.1 for BCP3, the public has shown interest in environmental monitoring of the reservoir. However, 40 years of monitoring has not shown any significant issues with fish and wildlife use of Carty Reservoir. In addition, CGS will continue operation under the existing WPCF in a manner that

[3] https://www.oregon.gov/energy/facilities-safety/facilities/Facilities%20library/BCP_final_order_1_091004.pdf

protects surface waters, wildlife, and other beneficial uses of Carty Reservoir. Anticipated Level of Interest by Reviewing Agencies

Although the proposed changes are considered administrative and would not affect environmental resources or public health and safety, it is anticipated that reviewing agencies could have interest in future maintenance and operation scenarios for Carty Reservoir for similar reasons as described for public interest, above. As documented in the Special Final Order #1 for BCP, Morrow County may have additional interest because of the facility's location in the Lower Umatilla Basin Groundwater Management Area.

PGE is coordinating with DEQ to revise WPCF permit number 100189 (provided in Attachment 2 of RFA2) to more accurately address the current operating conditions of CGS and the operation of a new septic system and specify the phasing out of monitoring requirements pertaining to BCP following closure, decommissioning and demolition. CGS would not assume any permit stipulations associated with BCP as part of this revision. Modifications to the WPCF permit and the plans associated with the WPCF permit will incorporate applicable surface water and groundwater monitoring requirements for CGS. A modified Wildlife and Habitat Mitigation and Monitoring Plan (WHMMP) will include any applicable monitoring requirements for Carty Reservoir.

PGE further anticipates interest from DEQ and ODFW in future Water Quality Monitoring Program or Terrestrial Monitoring Program implemented as part of the Site Certificate for BCP. PGE will coordinate with these agencies to clarify stipulations for these monitoring programs following the closure, decommissioning, and demolition of BCP. Any actions that warrant continuation as part of operation of CGS will be incorporated in relevant Water Quality Monitoring Program or WHMMP for CGS. Over 40 years of monitoring of the reservoir has not shown any significant issues with fish and wildlife use; therefore, PGE proposes that waterfowl use, fish, amphibian and riparian bird surveys can be discontinued. Ongoing raptor nest surveys will ensure identification of raptor nests in riparian trees so they can be protected from any potential impacts from facility operation and maintenance.

ODFW provided comments to ODOE on the preliminary RFA2 recommending that as a condition of the proposed amendment that the "Applicant maintain Carty Reservoir as it has since 1990." ODFW also recommended that if the Applicant desired to "change the operation or size of Carty Reservoir, that the certificate holder should work with ODOE and ODFW to mitigate for any loss in acres of wildlife habitat associated with the change in management." In assuming operation of Carty Reservoir, PGE agrees to maintain the reservoir at a minimum annual average of a 665-foot elevation level (See Site Certificate Condition 10.40, as modified in RFA2).

Likelihood of Significant Adverse Impact

The potential for significant impacts is negligible because there would be no change in the operational use of Carty Reservoir by CGS and the facility will continue to operate under and comply with an approved WPCF (see Attachment 2 of the WPCF), in compliance with existing and amended site certificate conditions, and consistent with applicable siting standards. There would be no significant impacts to wildlife habitat because PGE commits to operating the reservoir at a minimum annual average of a 665-foot elevation level.

Type and Amount of Mitigation

No additional mitigation or monitoring is proposed for Carty Reservoir.

4.2.2 Construction Substation

As described in Section 5.1.4 of the RFA2, PGE is requesting an amendment to transfer authorization of the Construction Substation, including its operation and maintenance, into the Site Certificate for CGS. The Construction Substation is located within a 40-foot by 80-foot fenced area that contains three wooden H-frame structures, transformers, and associated electrical equipment, including a 6-foot by 8-foot control house. It was built originally to provide construction power during construction of BCP and continues to be used as part of the onsite electrical distribution system. This facility is located approximately 0.3 miles south of CGS within the existing CGS Site Boundary. Operational access and maintenance would continue to occur using existing roads.

4.2.2.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring the authorization of the existing Construction Substation from the Site Certificate for BCP to CGS is not considered complex. PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. No major change in operation or maintenance is proposed as part of RFA2; however a new distribution line connecting to Carty Substation would be installed. Therefore, the transfer of authorization of these facilities from the Site Certificate for BCP to the Site Certificate for CGS is not considered complex.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of authorization of the existing Construction Substation from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because these facilities are an existing part of a larger industrial complex.

Anticipated Level of Interest by Reviewing Agencies

There would be no change in the operation or maintenance of this facility currently authorized under the Site Certificate for CGS or BCP, and PGE would continue to operate CGS in compliance with existing and amended site certificate conditions. Therefore, the continued operation of this facility currently authorized under the site certificates for BCP will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Likelihood of Significant Adverse Impact

The potential for significant impacts is negligible because there would be no change in the operation of the construction substation and the facility will continue to operate as currently authorized under the Site Certificate for BCP (other than to transfer the authorization of these components to the Site Certificate for CGS). PGE proposes to operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for the existing Construction Substation.

4.2.3 Irrigation Pump Station

As described in Section 5.1.9 of the RFA2, PGE is requesting that an existing irrigation pump station located on the shore of Carty Reservoir be added to the Site Certificate for CGS as related or supporting facilities. The pumps and associated equipment are located in the southwest arm of Carty Reservoir within an approximately 0.2-acre fenced area. PGE owns and operates the pump station and the 34.5 kV transmission line, which extends south from a PacifiCorp transmission line along an existing access road to a transformer located within the pump station.

4.2.3.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring authorization of the existing irrigation pump station from the Site Certificate for BCP to the Site Certification for CGS is not considered complex as authorization to construct and operate these facilities has already been reviewed and established in the Site Certificate for BCP. PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. No new construction or demolition is proposed for these facilities as their use will continue under the operation of CGS.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of authorization of the existing irrigation pump station from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because the pump station is an existing facility. No change in operation or maintenance is proposed as part of RFA2 (with the exception of a commitment to operate the reservoir elevation as described above in Section 4.2.2), and no new construction or demolition associated with these facilities would occur.

Anticipated Level of Interest by Reviewing Agencies

Anticipated interest by reviewing agencies in transferring the existing irrigation pump station from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because no change in operation or maintenance is proposed as part of RFA2 (with the exception of a commitment to reservoir elevation as described above in Section 4.2.1), and no new construction or demolition associated with these facilities would occur.

Likelihood of Significant Adverse Impact

The potential for significant impacts is negligible because there would be no change in the operation of the irrigation pump station and the facility will continue to operate as currently authorized under the Site Certificate for BCP (other than to transfer the authorization of these components to the Site Certificate for CGS). PGE proposes to operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for the existing Construction Substation.

4.2.3.2 Evaporation Ponds

As described in Section 5.1.7 of RFA2, PGE is requesting to incorporate two existing evaporation ponds located immediately northeast of CGS into the Site Certificate for CGS and approval to have the option to send this combined holding pond wastewater to the evaporation ponds. These ponds are currently permitted under the Site Certificate for BCP and are used solely by BCP. The larger of the two ponds is approximately 10 acres and the smaller pond is approximately 1.5 acres. Wastewater from the holding ponds would be conveyed to the evaporation ponds via a new approximately 1,000-foot-long underground wastewater pipeline.

4.2.3.3 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring the authorization of the existing evaporation ponds from the Site Certificate for BCP to CGS is not considered complex. PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. A minor change in operation is proposed as part of RFA2 because this facility would no longer service BCP and would instead service CGS via a new approximately 1,000-foot-long underground wastewater pipeline. Instalation of the new pipe would require an approximately 4-foot-wide trench connecting CGS to the evaporation ponds.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of authorization of the existing evaporation ponds from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because these facilities are existing and in operation as part of a larger industrial complex and discharge that would go to evaporation ponds is currently directed to Carty Reservoir.

Anticipated Level of Interest by Reviewing Agencies

Agency interest in the transfer of authorization of these existing facilities from the Site Certificate for BCP to the Site Certificate for CGS is also expected to be negligible for the reasons described above. As part of RFAS2, PGE is requestiiong to add turbine rinse water to wastewater sent to Carty Reservoir, which would be included in the modified WPCF approved by DEQ. Based on this modification, turbine rinse water would also be sent to the evaporation ponds should PGE choose to send combined holding pond wastewater to the evaporation ponds. The evaporation ponds would be operated in compliance with Site Certificate Condition 9.8 (removed in Amendment 1 but restored in this RFA2).

Likelihood of Significant Adverse Impact

The potential for significant impacts is negligible because new construction would only be required for the pipeline connecting CGS to the evaporation ponds, and disturbance would be limited to 0.1 acre. Though combined holding pond wastewater from CGS would be sent to the evaporation ponds, the holding ponds would be operated in a similar manner. PGE proposes to operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

4.2.4 Existing Offsite Transmission Lines

As described in Section 5.1.3 of the RFA2, offsite transmission lines considered in RFA2 include: the existing 500 kV Grassland to Slatt, 230 kV BCP to Dalreed, 34.5 kV BCP to railroad crossing at Tower Road, and 34.5 kV underground transmission line connecting the irrigation pump station on the shore of Carty Reservoir to an existing PacifiCorp transmission line(Figure 2a and Figure 2b). These existing facilities are currently authorized and operated in compliance with the Site Certificate for BCP.

4.2.4.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring authorization of the existing offsite transmission lines from the Site Certificate for BCP to the Site Certification for CGS is not considered complex as authorization to construct and operate these facilities has already been reviewed and established in the Site Certificate for BCP. PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. No new construction or demolition is proposed for these facilities as their use will continue under the operation of CGS.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of authorization of offsite transmission lines from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because the transmission lines are existing facilities. No change in operation or maintenance is proposed as part of RFA2, and no new construction or demolition associated with these facilities would occur.

Anticipated Level of Interest by Reviewing Agencies

Anticipated interest by reviewing agencies in the 34.5 kV transmission line connecting the irrigation pump station on the shore of Carty Reservoir to the existing PacifiCorp transmission line is expected to be negligible because the line is currently underground and no disturbance or change in operation would occur.

ODFW is expected to have an interest in how PGE intends to manage fish and wildlife habitat and threatened and endangered species during the continued operation and maintenance of the existing 500 kV Grassland to Slatt, 230 kV BCP to Dalreed, 34.5 kV BCP to railroad crossing at Tower Road. As described in Sections 8.7 and 8.8 of the RFA2 and detailed in the revised Wildlife and Habitat Mitigation and Monitoring Plan (WHMMP) in Attachment 5 of RFA2, PGE proposes to incorporate portions of the amended site boundary that coincide with these facilities into the 5-year interval surveys, extending throughout the life of the project. In coordination with ODFW, PGE will target the species surveys to focus on suitable habitat conditions for the BCP to Dalreed transmission line where no habitat characterization or survey records are available. PGE would revise the existing mitigation and monitoring plan as needed based on the survey results.

SHPO could also have an interest in the addition of offsite transmission lines to the Site Certificate for CGS because portions of this area have not been surveyed for historic, cultural, and archaeological resources. These areas primarily include the rights of way (ROWs) for the 230 kV

BCP to Dalreed transmission line and areas along the western and southern shores of the Carty Reservoir; neither of which have new construction activity proposed as part of RFA2.

PGE also proposes to carry forward the Site Certificate conditions listed in Section 11.0 of the First Amended Site Certificate for CGS, and, as such, commits to performing pre-construction surveys in disturbance areas that have not been previously surveyed. Per existing Site Certificate conditions, PGE will also complete any emergency maintenance in accordance with its existing Inadvertent Discovery Plan.

Morrow and Gilliam counties could have a minor interest in the transfer of authorization for these existing facilities from the Site Certificate for BCP to the Site Certificate for CGS; however applicable sections of comprehensive plans and zoning ordinances have not changed in ways that would impact the Council's prior findings under the land use standard.

Likelihood of Significant Adverse Impact

There would be no change in the operation or maintenance of existing offsite transmission facilities currently authorized under the site certificates for CGS or BCP, other than to transfer the authorization of the components currently authorized under the Site Certificate for BCP to the Site Certificate for CGS. PGE proposes to operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for these existing offsite transmission lines.

4.2.5 Existing Onsite Transmission Lines

As described in Section 5.1.3 of the RFA2, onsite transmission lines considered in RFA2 include the existing 12.5 kV underground distribution line connecting the construction substation to the Boeing Well pump and 480-volt underground distribution line connecting the 34.5 kV transmission line to the Carty Reservoir seepage pumps (Figure 2a and Figure 2b). These facilities are currently authorized and operated in compliance with the Site Certificate for BCP[4].

4.2.5.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring the authorization of the existing onsite transmission lines from the Site Certificate for BCP to CGS is not considered complex. PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. No change in operation or maintenance is proposed as part of RFA2, and no new construction or demolition associated with these facilities would occur. Therefore, the transfer of authorization of these facilities from the Site Certificate for BCP to the Site Certificate for CGS is not considered complex.

[4] Note that authorization of these facilities in the original Site Certificate for BCP (or subsequent amendments) is not explicit. PGE assumes that because these facilities are necessary for operation of BCP, they were considered in granting approval to construct and operate BCP. PGE is using RFA2 to clarify existing components associated with BCP and their proposed inclusion in the Site Certificate for CGS.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of authorization of onsite transmission lines from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because these facilities are existing, relatively minor in scale, and part of a larger industrial complex.

Anticipated Level of Interest by Reviewing Agencies

Agency interest in the transfer of authorization of these existing facilities from the Site Certificate for BCP to the Site Certificate for CGS is also expected to be negligible for the reasons described above, and because no new permits would be required for the continued operation of these facilities.

Likelihood of Significant Adverse Impact

There would be no change in the operation or maintenance of the facilities currently authorized under the Site Certificate for CGS or BCP, and PGE would continue to operate CGS in compliance with existing and amended site certificate conditions. Therefore, the continued operation of these related or supporting facilities currently authorized under the site certificates for BCP will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for these existing onsite transmission lines.

4.2.6 Interconnecting Water Pipelines and Potable Water Source (Boeing Well)

As described in Section 5.1.6 of RFA2, PGE is requesting that the Site Certificate for CGS be amended to transfer authorization for operation of the following existing water pipelines for the Site Certificate for BCP to the Site Certificate for CGS (Figure 2a and Figure 2b):

- Water Discharge Channel: PGE is requesting that the Site Certificate for CGS be amended to incorporate the existing water discharge channel. Under current operations, CGS processed waste and plant drainage waste flows are discharged into holding ponds, from which wastewater is discharged into BCP's water discharge channel prior to entering Carty Reservoir. The holding ponds and discharge pipe are currently permitted under the Site Certificate for CGS, but the water discharge channel is currently permitted under the Site Certificate for BCP.
- Backup Potable/Firewater Supply: PGE is requesting that the Site Certificate for CGS be amended to incorporate the existing 300,000-gallon water storage tank, adjacent pump house, and 4-inch-diameter intake pipeline from Boeing Well. This facility is currently used solely by BCP; once connected to CGS, water may be used as a backup source for potable water or fire water.
- Raw Water Intake: PGE is requesting that the Site Certificate for CGS be amended to include the raw water intake structure at Carty Reservoir and support equipment.

- Potable Water Source (Boeing Well): PGE is requesting that the Site Certificate for CGS be amended to incorporate the Boeing Well and pump house.

4.2.6.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

Transferring authorization of these existing facilities from the Site Certificate for BCP to the Site Certification for CGS is not considered complex. Authorization to construct and operate these facilities has already been reviewed and established in the Site Certificate for BCP, and PGE has operated these facilities in compliance with the Site Certificate for BCP without issue. Actions required for isolation of these facilities from BCP prior to closure and decommissioning are straightforward and would not require new construction. Therefore, the transfer of the authorization of these facilities from the Site Certificate for BCP to the Site Certificate for CGS is not considered complex.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the transfer of interconnecting water pipelines from the Site Certificate for BCP to the Site Certificate for CGS is expected to be negligible because these facilities are existing, relatively minor in scale, and part of a larger industrial complex, and no new construction is proposed.

Anticipated Level of Interest by Reviewing Agencies

Agency interest in the transfer of interconnecting water pipelines from the Site Certificate for BCP to the Site Certificate for CGS is also expected to be negligible for the reasons described above, and because no new permits would be required for the continued operation of these facilities.

Likelihood of Significant Adverse Impact

There would be no change in the operation or maintenance of the interconnecting water pipelines currently authorized under the Site Certificate for BCP, other than to transfer the authorization of these components to the Site Certificate for CGS. PGE proposes to operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for these existing facilities.

4.2.7 Existing Sanitary Sewer Lagoons

As described in Section 5.1.4 of RFA2, PGE is requesting that the Site Certificate for CGS be amended to include the existing sanitary sewage lagoons (Figure 2a and Figure 2b). The existing sewage lagoons would remain in place and would continue to be used by BCP and CGS until the new sanitary septic system is constructed and operational.

4.2.7.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

This change is not considered complex because the sewage lagoons facility already services CGS under current operations. Sanitary sewage from CGS would continue to be discharged directly into

the BCP sewage lagoon via CGS' sewer lift station. This sewer lift station would remain operational until the new septic system is constructed for CGS. Therefore, the transfer of the authorization of the sewage lagoons from the Site Certificate for BCP to the Site Certificate for CGS is not considered complex.

Anticipated Level of Public Interest in the Proposed Change

Anticipated public interest is expected to be negligible because this facility already services CGS under current operations.

Anticipated Level of Interest by Reviewing Agencies

The existing sewage lagoons are covered under WPCF permit number 100189, issued by DEQ. This permit expires on April 30, 2023. PGE is coordinating with DEQ to modify the WPCF to better represent current and planned operating conditions. The revised WPCF is provided in Attachment 2 of RFA2.

Likelihood of Significant Adverse Impact

PGE currently operates CGS and BCP in compliance with the conditions of WPCF permit number 100189 and will continue to do so to ensure that waste and process discharges do not exceed the carrying capacity, degrade, or threaten the availability of water resources. PGE will operate CGS in compliance with existing and amended site certificate conditions, consistent with applicable siting standards.

Type and Amount of Mitigation

No new mitigation is proposed for the existing sewage lagoons.

4.3 Authorize Construction and Operation of New Infrastructure

As described in Section 5.1 of RFA2, PGE is requesting that the Site Certificate for CGS be amended to authorize construction and operation of new infrastructure, including a sanitary septic system, water pipeline connecting to BCP's 300,000-gallon water tank, wastewater pipeline connecting CGS to BCP's two evaporation ponds, security guard station, new office and warehouse building, and Carty Substation (Figure 3). With the exception of the Carty Substation, these facilities would be constructed entirely within the portion of the current Site Boundary located in Morrow County. The Carty Substation would be construced within the existing Site Boundary for BCP and the amended Site Boundary for CGS. The proposed new related or supporting facilities to be constructed will also be located over 200 miles from the Cascadia Subduction Zone and is in the light damage zone as defined in the Oregon Resiliency Plan (2013), making the new related or supporting facilities inherently resilient to region-wide seismic disaster. Local seismic resiliency will be provided by adhering to current seismic building codes, when building codes are applicable to the new construction. A National Pollutant Discharge Elimination System 1200-C permit will not be required because stormwater associated with land disturbances for the proposed additional facilities at CGS will not reach waters of the state. The proposed Carty Substation and associated distribution lines, septic system, water pipeline, wastewater pipeline, security guard station, and office/warehouse building are each an "accessory use or accessory structure" as defined in MCZO 1.030 and would not constitute an amendment to the existing CUP for CGS or have an effect on CGS's compliance with Article 6 of the MCZO. The associated overhead distribution line from the

Carty Substation to the backup 7.2 kV line would be mounted on towers less than 200 feet in height, thereby not requiring a CUP per MCZO 3.070A, B.

4.3.1 Septic System

PGE is requesting that the Site Certificate for CGS be amended to include a new septic system for handling CGS sanitary sewer waste (Figure 2b, Figure 3), consisting of a septic tank, distribution unit, and absorption facility that would be consistent with a "Standard Subsurface System" as defined in OAR 340-071-0220.

4.3.1.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The proposed new septic system is not considered complex. From a technical perspective, the new facility would be consistent with a "Standard Subsurface System" (as defined in OAR 340-071-0220) and located in an area where the flows from CGS can be transported via gravity to reduce the maintenance operations associated with the existing sewer lift station. The septic system would be designed to manage up to 1,960 gallons per day (gpd), calculated on the assumption of 31 employees working 8-hour shifts per day at CGS and 25 maintenance employees working 8-hour shifts at BCP[5].Sanitary sewer flows from the BCP will use the existing sewer lift station and the existing CGS sewer pipeline with minor pipeline modifications. Power circuits to the existing sewer lift station will remain as is.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the proposed change is expected to be negligible, as the new septic system is a relatively minor facility.

Anticipated Level of Interest by Reviewing Agencies

Reviewing agencies are expected to have an interest in ensuring that the new septic system is constructed in accordance with applicable substantive criteria. PGE demonstrated compliance in Section 8.4.2 of RFA2.

The proposed new septic system does not require a WPCF permit because the design flow of 1,960 gpd is beneath the 2,500 gpd threshold for septic systems requiring a WPCF permit. Instead, Umatilla County Department of Public Health will issue a Construction Permit for On-site Sewage Treatment System for the construction and operation of the new septic system, thereby documenting consistency with County land use standards. The Umatilla County Public Health Department has performed a site evaluation and determined the site to be acceptable for a standard, non-residential septic system.

Finally, no National Pollutant Discharge Elimination System (NPDES) 1200-C permit would be required because the construction disturbance area is not proximate to surface waters and therefore stormwater runoff would infiltrate and not enter surface waters of the State.

[5] This figure does not include additional staff that may be onsite during decommissioning and demolition of BCP.

Likelihood of Significant Adverse Impact

The location of the septic system was selected, in part, to minimize land disturbance and avoid critical resource areas. The Umatilla County Public Health Department has performed two site evaluations and determined the site to be acceptable for a standard, non-residential septic system. The system will be sited with sufficient distance from groundwater and surface waters to prevent pollution of water resources. The site will not impact any cultivated farmland. The facility will be constructed in accordance with applicable Morrow County zoning ordinances.

Through its analysis of applicable siting standards in RFA2, PGE has determined that construction of the new septic system will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No mitigation is proposed due to the lack of impacts anticipated and adherence to all applicable rules and standards.

4.3.2 New Interconnecting Pipelines

PGE is requesting that the Site Certificate for CGS be amended to incorporate (1) a new water pipeline connecting the CGS to the 300,000-gallon tank and (2) a new wasewater pipeline conneting CGS to the existing evaporation ponds (Figure 2a, Figure 2b, and Figure 3).

4.3.2.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The proposed new water and wastewater pipeline are not considered technically complex. The proposed water pipeline would be located underground within a previously disturbed area. The pipeline would follow an alignment that minimizes damage to surface features, such as paving and fencing. The pipeline would pass under existing buried utilities and would connect to the underground portion of the existing BCP water tank outlet line. Controls and power would be located at the existing CGS fire water pump house. The proposed wastewater pipeline would be underground and would measure approximately 1,000-foot-long. The temporary disturbance footprint for the new wastewater pipeline is estimated to be 0.1 acre, assuming a 4-foot-wide trench.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the proposed change is expected to be negligible, as the water and wastewater pipelines are relatively minor facilities designed to service existing facilities authorized under the site certificate for BCP.

Anticipated Level of Interest by Reviewing Agencies

Reviewing agencies are expected to have an interest in ensuring that the new water pipelines areconstructed in accordance with applicable substantive criteria. PGE demonstrated compliance in Section 8.4.2 of RFA2.

A NPDES 1200-C permit would not be required because the construction disturbance area is not proximate to surface waters and therefore stormwater runoff would infiltrate and not enter surface waters of the State.

Likelihood of Significant Adverse Impact

The location of the water pipeline was selected, in part, to minimize land disturbance and avoid critical resource areas. The sites selected do not impact any cultivated farmland and are sites currently owned by PGE. Likewise, the wastewater pipeline is sited to provide a direct connection to the evaporation ponds across previousl;y disturbed areas.

A National Pollutant Discharge Elimination System (NPDES) 1200-C permit will not be necessary because the disturbance area associated with the new pipelines is not proximate to surface waters and therefore stormwater runoff would infiltrate and not enter surface waters of the State.

Through its analysis of applicable siting standards in RFA2, PGE has determined that construction of the new water and wastewater pipelines will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No mitigation is proposed due to the lack of impacts anticipated and adherence to all applicable rules and standards.

4.3.3 Security Guard Station

PGE proposes to construct a new security guard station along Tower Road to the north of CGS. The security guard station will have a maximum footprint of 250 square feet and will include a single restroom. The proposed location for the security guard station and new fencing is on currently vegetated land. Potable water, waste water, electricity, and communication conduits will need to be placed, and these new lines are anticipated to cross through paved, unpaved, and vegetated areas. The utility lines will be buried. The temporary disturbance footprint is estimated to be 0.26 acre which assumes a 4-foot wide trench for the plumbing and communication lines and a 10-foot disturbance buffer around the building.

4.3.3.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The proposed new security guard station is not considered complex. It would be limited to a small structure approximately 250 square feet in size, serviced by minor utilities.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the proposed change is expected to be negligible, as the new security guard station is a relatively minor facility designed to service existing facilities.

Anticipated Level of Interest by Reviewing Agencies

Reviewing agencies are expected to have an interest in ensuring that construction and operation of the security guard station complies with applicable substantive criteria. PGE demonstrated compliance in Section 8.4.2 of RFA2.

A NPDES 1200-C permit would not be required because the construction disturbance area is not proximate to surface waters and therefore stormwater runoff would infiltrate and not enter surface waters of the State.

Likelihood of Significant Adverse Impact

The location of the security guard station was selected, in part, to minimize land disturbance and avoid critical resource areas. The site does not impact any cultivated farmland and is located on land currently owned by PGE. Through its analysis of applicable siting standards in RFA2, PGE has determined that construction of the new security guard station will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No mitigation is proposed due to the lack of impacts anticipated and adherence to all applicable rules and standards.

4.3.4 New Office and Warehouse Building for CGS

RFA2 requests authorization for PGE to construct a new building within the existing CGS fence line to provide additional office and warehouse space. The building would be approximately 60 feet by 100 feet and approximately 20 feet tall.

4.3.4.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The office and warehouse space would be similar in appearance to the existing site buildings. All temporary or permanent disturbance associated with the new building would occur entirely within the existing fence line. Therefore, the proposed change is not considered complex.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the proposed change is expected to be negligible, as the new building is a relatively minor facility entirely within the existing fence line.

Anticipated Level of Interest by Reviewing Agencies

Reviewing agencies are expected to have an interest in ensuring that the new office and warehouse space is constructed in accordance with applicable substantive criteria. PGE demonstrated compliance in Section 8.4.2 of RFA2.

No NPDES 1200-C permit would be required because the construction disturbance area is not proximate to surface waters and therefore stormwater runoff would infiltrate and not enter surface waters of the State.

Likelihood of Significant Adverse Impact

There would be no additional temporary or permanent disturbances associated with the new building because it would be constructed entirely within the existing fence line. Through its analysis of applicable siting standards in RFA2, PGE has determined that construction of the new office and warehouse space will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No mitigation is proposed due to the lack of impacts anticipated and adherence to all applicable rules and standards.

4.3.5 Carty Substation

As described in Section 5.1.5 of the RFA2, PGE is requesting an amendment to construct and operate a new substation, Carty Substation, on previously disturbed lands within the Site Boundary for BCP. Currently the 230 kV Boardman to Dalreed transmission line connects to the BCP by tying in directly to the BCP power block. However, because this facility will be demolished once BCP ceases operation, the 230 kV Boardman to Dalreed line needs to be separated from the power block. A new 7.2 kV open box structure substation, control house for relay, SCADA, communications, and DC system, dead-end structure for the existing 230 kV transmission line, and perimeter security fence would be constructed southeast of the construction substation, as shown in Figure 2a, Figure 2b, and Figure 3. The temporary disturbance footprint is estimated to be 0.6 acre, which assumes a 10-foot buffer around the fence line. New transmission infrastructure would relocate the existing 230 kV from the power block at BCP to a new dead-end structure. The new Carty Substation infrastructure would support the future abandonment of the existing 500 kV line connecting BCP to Grassland Substation, while maintaining optical ground wire (OPGW) for communication needs. New distribution lines would be constructed to (1) connect to the existing pump house and construction substation via an existing underground conduit, (2) connect to the existing intake structure via an existing underground conduit from CGS to the intake structure, and (3) connect to the existing H-frame to connect to CGS for backup power supply via a new overhead line.

4.3.5.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The proposed new substation is not considered complex. The temporary disturbance footprint is estimated to be 0.6 acre, which assumes a 10-foot buffer around the fence line. New transmission infrastructure would relocate the existing 230 kV from the power block at BCP to a new dead-end structure. All work would be performed in areas adjacent to the existing power block and would make use of existing underground conduit.

Anticipated Level of Public Interest in the Proposed Change

Public interest in the authorization of a new substation for CGS is expected to be negligible because the facility would be constructed within the existing disturbance footprint for BCP. The new

substation and associated transmission are relatively minor in scale, and part of a larger industrial complex.

Anticipated Level of Interest by Reviewing Agencies

Agency interest in the construction of new facilities within the existing site boundary for BCP is also expected to be negligible for the reasons described above, and because no new permits would be required for the continued operation of these facilities.

Likelihood of Significant Adverse Impact

The location of the new substation was selected to minimize land disturbance while protecting important infrastructure during the demolition of BCP. Construction would occur in developed areas designated as Habitat Category 6, which is defined as areas with existing infrastructure, roads, buildings, and nearby heavily disturbed vegetated areas with no potential to provide important wildlife habitat. Through its analysis of applicable siting standards in RFA2, PGE has determined that construction of the new substation and associated transmission lines will not alter the Council's basis for its previous findings that CGS complies with applicable siting standards and will not create new significant impacts to resources and interests protected by the Council's siting standards.

Type and Amount of Mitigation

No mitigation is proposed due to the lack of impacts anticipated and adherence to all applicable rules and standards.

4.4 Revise Existing Water Pollution Control Facility Permit

PGE is also requesting that the Site Certificate for CGS be amended to include modifications to WPCF permit number 100189. PGE is coordinating with DEQ to revise the WPCF permit, provided in Attachment 2 of RFA2, to more accurately address the current operating conditions of CGS.

4.4.1 Certificate Holder's Evaluation

Complexity of the Proposed Change

The modification to the existing WPCF permit is not considered complex as changes were made with the goal of more accurately representing the operating conditions of CGS and BCP.

Anticipated Level of Public Interest in the Proposed Change

Public interest is expected to be negligible because the proposed changes would be applied to an existing permit, and none are triggered by the construction and operation of any new related or supporting facility.

Anticipated Level of Interest by Reviewing Agencies

As the regulating agency, DEQ is expected to have an interest in the modifications to an existing permit. As such, PGE has coordinated closely with DEQ in preparing these modifications.

Likelihood of Significant Adverse Impact

Modifications to the WPCF reduce the likelihood of significant impacts to waters of the State by more accurately representing and accounting for the current operating conditions of CGS and BCP.

Type and Amount of Mitigation

No mitigation is proposed as part of the modifications to the existing WPCF permit.

4.5 Update Facility Description

In the Application for Site Certificate, the communication lines supporting CGS were expected to originate from BCP and connect to CGS. During construction, the location of the lines was modified to originate from an existing CenturyLink vault near the northwest corner of the BCP lined evaporation ponds, extend down the dirt access road along Tower Road, and then into CGS. PGE worked with DOE and ODFW to update the disturbance location.

Updating the description of the communication lines in the Site Certificate for CGS would not alter the operations of CGS as defined in OAR 345-027-0350(4).

4.6 Revise Site Certificate Conditions

Attachment 1 of RFA2 provides a redlined version of the current Site Certificate for CGS. PGE has proposed modifications to the certificate to reflect the proposed changes described in RFA2, as well as to update information that has changed since the First Amended Site Certificate for CGS.

5 Conclusion

As documented in Section 4 of this Amendment Determination Request, detailed further in the RFA2, and summarized in Table 1, below, PGE submits that changes proposed in RFA2 are not complex, would not generate a high level of interest or opposition from the public or reviewing agencies, and would not result in a significant adverse impact that the Council has not addressed in an earlier order. Except for proposed new infrastructure, all facilities included in RFA2 are currently authorized under the Site Certificate for BCP and/or CGS. Proposed new facilities are minor in scope and, because they are considered accessory uses, do not require new land use approval. PGE therefore concludes that the proposed changes considered in RFA2 justify review under the DOE's Type B review process.

Table 1 Summary of Factors Considered in Justifying a Type B Amendment Review Process (OAR 345-027-0057[8])

Note that there is no mitigation proposed for any facility included in PGE's Request for Amendment No.2.

	Complexity	Public Interest	Agency Interest	Significant Impact
Carty Reservoir	Not Complex; Existing Facility currently authorized under the Site Certificate for BCP and CGS	Interest pertaining to BCP	Interest pertaining to existing WPCF permit number 100189 and relationship to future monitoring requirements for BCP; Interst from ODFW in maintaining elevation of the reservoir. PGE agrees to maintain the reservoir at a minimum annual average of a 665-foot elevation level (See Site Certificate Condition 10.40, as modified in RFA2)	No significant impacts anticipated; Continued compliance with WPCF permit number 100189; no significant impacts to wildlife habitat because PGE commits to operating the reservoir at a minimum annual average of a 665-foot elevation level
Construction Substation	Not Complex; Existing Facility currently authorized under the Site Certificate for BCP	Interest expected to be negligible because facilities are already constructed.	Interest assumed to be negligible; no new permits required	No significant impacts; No change in operation and maintenance
Irrigation Pump Station	Not Complex; Existing Facility currently authorized under the Site Certificate for BCP	Interest expected to be negligible because facilities are already constructed	Interest assumed to be negligible; no new permits required	No significant impacts; No change in operation and maintenance
Evaporation Ponds	Not Complex; Existing Facility currently authorized under the Site Certificate for BCP; would require an approximately 4-foot-wide trench connecting CGS to the evaporation ponds	Interest expected to be negligible because facilities are already constructed; discharge for CGS already directed to Carty Reseroir	Interest assumed to be negligible; no new permits required	No significant impacts; Minor change in operation because wastewater would come from CGS

	Complexity	Public Interest	Agency Interest	Significant Impact
Existing Offsite Transmission Lines	Not Complex; Existing Facilities currently authorized under the Site Certificate for BCP.	Interest expected to be negligible because facilities are already constructed.	Interest from ODFW in future monitoring of expanded site boundary. Negligible interest from SHPO and Morrow and Gilliam County	No significant impacts; No change in operation and maintenance
Existing Onsite Transmission Lines	Not Complex; Existing Facilities currently authorized under the Site Certificate for BCP.	Interest expected to be negligible because facilities are already constructed, minor in scale, and part of larger infrastructure	Interest assumed to be negligible; no new permits required	No significant impacts; No change in operation and maintenance
Existing Interconnecting Water Pipelines and Potable Water Source	Not Complex; Existing Facilities currently authorized under the Site Certificate for BCP and CGS	Interest expected to be negligible because facilities are already constructed, minor in scale, and part of larger infrastructure.	Interest assumed to be negligible; no new permits required.	No significant impacts; No change in operation and maintenance
Existing Sanitary Sewage Lagoons	Not Complex; Existing Facility currently authorized under the Site Certificate for BCP and CGS	Anticipated public interest is expected to be negligible because this facility already services CGS under current operations	Facility authorized under WPCF permit number 100189; no change in operation proposed in RFA2	No significant impacts anticipated; Continued compliance with WPCF permit number 100189
Modify Site Boundary	Not complex; No new or different effects on the operation of CGS; No change in land use	Anticipated public interest is expected to be minor because change is not associated with new construction or change in land use.	Interest from ODFW in future monitoring of expanded site boundary; Negligible interest from SHPO and Morrow and Gilliam County; Interest from DEQ and ODFW in the inclusion of Carty Reservoir	No significant impacts anticipated; Modified site boundary addresses areas already authorized under existing site certificates and does not include new construction

	Complexity	Public Interest	Agency Interest	Significant Impact
New Septic System	Not Complex; considered a "Standard Subsurface System"	Anticipated public interest is expected to be negligible; facility designed to service existing facilities (CGS and BCP)	Anticipated interest in compliance with applicable substantive criteria and design requirements; No WPCF required; No NPDES 1200-C permit required; approval obtained from Umatilla County Public Health Department	No significant impacts; location selected to minimize land disturbance and avoid critical resource areas; approval obtained from Umatilla County Public Health Department
New Water Pipeline	Not complex; connecting to existing infrastructure	Anticipated public interest is expected to be negligible because this is a minor facility constructed within an industrialize site	Anticipated interest in compliance with applicable substantive criteria; No NPDES 1200-C permit required	No significant impacts; location selected to minimize disturbance and avoid critical resource areas; no impacts to cultivated farmland
New Security Guard Station and New Office and Warehouse Space	Not complex; Minor in scale	Anticipated public interest is expected to be negligible because this is a minor facility constructed within an industrialize site; warehouse is within existing fenceline	Anticipated interest in compliance with applicable substantive criteria; No NPDES 1200-C permit required	No significant impacts; location selected to minimize disturbance and avoid critical resource areas; no impacts to cultivated farmland; warehouse is within existing fenceline
New Carty Substation	Note complex; new transmission infrastructure would relocate the existing 230 kV from the power block at BCP to a new dead-end structure adjacent to the existing power block	Anticipated public interest is expected to be negligible because the facility would be constructed within the existing disturbance footprint for CGS	Interest assumed to be negligible; no new permits required.	No significant impacts; location of the new substation selected to minimize land disturbance and would occur in developed areas designated as Habitat Category 6 (areas with existing infrastructure)

Figures

Figure 1 Carty Generating Station–Site Boundary

Figure 2a Carty Generating Station–Related or Supporting Facilities

Figure 2b Carty Generating Station–Related or Supporting Facilities

Figure 3 Carty Generating Station–Proposed New Related or Supporting Facilities