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DAYZEN LLC

August 26, 2016

Bruce Boyer
Compliance Project Manager
Siting, Transmission and Environmental Protection Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814-5512

Subject: **PACIFIC GAS AND ELECTRIC COMPANY'S PETITION FOR AMENDMENT**
GATEWAY GENERATING STATION
DOCKET NO. (00-AFC-01C)

Dear Mr. Boyer,

On behalf of Pacific Gas and Electric Company (PG&E) DayZen LLC hereby submits the Petition for Amendment (Petition) for Gateway Generating Station (00- AFC-01C) (GGS) to request addition of a Stormwater Treatment System.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized by PG&E to submit this Petition for Amendment.

Sincerely,

Scott A. Galati
Counsel to PG&E

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PETITION FOR AMENDMENT

GATEWAY GENERATING STATION (00-AFC-1C)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION

SUBMITTED BY: **PACIFIC GAS & ELECTRIC COMPANY (PG&E)**

AUGUST 2016

DAYZEN LLC

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APPENDICES

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Section 1 INTRODUCTION

1.1 INTRODUCTION TO PETITION

Pursuant to Section 1769 of the California Energy Commission (Commission) regulations[1], Pacific Gas & Electric Company (PG&E) files this Petition For Amendment (Petition) with the California Energy Commission (Commission) to modify the Gateway Generating Station (GGS). This Petition requests the addition of a storm water treatment system that is now necessary for the GGS to comply with the most recent National Pollutant Discharge Elimination System (NPDES) Industrial General Permit (IGP).[2] This section describes the procedural background of the GGS and cites the authority for the Commission to process this Petition.

Section 2 of the Petition describes the modifications proposed the GGS including an explanation of the need for each modification.

Sections 3, 4, 5 and 6 contain analysis of the proposed modifications comparing the potential environmental impacts from the modifications to the potential environmental impacts of the GGS as approved in the Commission Final Decision[3]. As discussed in these Sections, PG&E does not anticipate any significant environmental impacts from the proposed modifications and therefore is not proposing any modifications to the existing Conditions of Certification.

Section 7 contains an analysis demonstrating that the modifications do not increase any potential effects on nearby property owners or the public.

1.2 FINAL DECISION BACKGROUND

An Application For Certification (AFC) for the GGS was originally filed with the Commission by Mirant Delta LLC on January 31, 2000 to construct and operate the GGS, formerly known as Contra Costa Unit 8. The Commission issued the Final Decision approving the project on May 30, 2001.[4] Mirant Delta LLC began construction shortly thereafter but suspended all construction in 2002 due to financial difficulties. On July 27, 2006, the Commission approved addition of PG&E as co-owner of the GGS.[5]

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[1] Title 20 CCR Section 1769

[2] NPDES Industrial General Permit #2014-0057-DWQ

[3] References to the Commission Final Decision include all amendments approved after issuance and prior to the date of this Petition For Amendment

[4] Final Decision for Contra Costa Unit #8, 00-AFC-1, dated May 30, 2001

[5] Order Approving PG&E as a co-owner with Mirant Delta, LLC for the Contra Costa Unit #8, dated July 27, 2006, TN 37486

On December 4, 2006, PG&E became the sole owner of the GGS and officially changed the project name to GGS. PG&E began constructing the GGS shortly thereafter.

1.3 PRIOR PETITIONS FOR AMENDMENT

PG&E filed its first Petition For Amendment on December 19, 2006 to eliminate use of San Joaquin River water for cooling and replace the wet cooling tower with an air cooled condenser including several design modifications. The Commission approved the amendment on August 1, 2007.[6]

Since the first Petition For Amendment, PG&E has file numerous amendments, most of which were processed as Insignificant Project Modifications and therefore not requiring approval by the Commissioners. These included changing construction hours, adding water tanks, replacing inlet chilling system, rerouting of the sewer line, modification of air quality conditions, addition of roof covers for equipment, addition of storage sheds, and replacement of trailer mounted water treatment equipment.[7]

The last Petition For Amendment was approved by the Commission on August 14, 2015 and was to allow addition of steam turbine decking.[8]

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS

As described in Sections 3, 4, 5 and 6 of this Petition, the project modifications proposed herein, with implementation of the Conditions of Certification contained in the Final Decision and subsequent amendments will not result in significant environmental impacts and will comply with all applicable Laws, Ordinances, Regulations and Standards (LORS).

1.5 CONSISTENCY OF PROJECT MODIFICATIONS WITH LICENSE

As demonstrated in Sections 3 through 6 the proposed modifications proposed in this Petition do not undermine any of the findings and conclusions contained in the Final Decision.

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[6] Order No. 07-0802-2, dated August 1, 2007, TN 41809

[7] The approvals are contained in the Commission docket and not reproduced here.

[8] Staff Approval of Modification, dated August 14, 2015, TN 205737

Section 2 DESCRIPTION OF PROJECT AMENDMENT

2.1 OVERVIEW OF PROPOSED MODIFICATIONS

PG&E has prepared this Petition to install water treatment equipment in order to comply with the most recent NPDES IGP requirements for storm water discharges. The proposed treatment system will be a package-type system from WaterTectonics Co. Detailed descriptions of the system, its operation, installation procedures and schedule, and the purpose and need of the system are provided below.

2.1.1 STORM WATER TREATMENT SYSTEM

The storm water treatment system is a pre-packaged system consisting of source and settling tanks a treatment system module and a media filter assembly. The system, once tuned, is expected to reduce the iron content of the storm water effluent from its current 5 parts per million (ppm) level to less than or equal to 1 ppm.

Figure 1, Site Plan shows the proposed location of the new storm water treatment equipment. The new equipment will be located immediately adjacent to the existing concrete basin used to collect site storm water before it is discharged to the river. This existing basin is identified as Sampling Point E006 in the GGS Storm Water Pollution Prevention Plan. The location for the equipment was previously graded during construction and is paved as well as graveled.

Figure 2, Project Layout, shows the location of the equipment with each feature labeled “A” through “H”. The area labeled “A” is the existing concrete storm water collection basin. The concrete basin has a sump and discharge pump. The area labeled “B” is the source tank which will receive the storm water collected in the existing concrete basin and has a capacity of 20,000 gallons. Area “C” will contain the Treatment System Module, which will be housed in a Conex-type container. Figure 3 is a photograph of the Treatment System Module. Area “E” contains a 20,000 gallon settling tank. The area labeled “G” contains the Media Filter Assembly, a photograph of which is shown in Figure 4.

2.1.2 TREATMENT PROCESS DESCRIPTION

To describe each step in the treatment process, Figure 2 uses the labels “A” through “H”.

Step “A” involves pumping the storm water collected in the existing concrete basin via a submerged sump pump into the Source Tank to stage the storm water for processing.

Step “B” involves pumping the storm water in the Source Tank forward through the Treatment System Module.

Step “C” takes place inside the Treatment System Module where the storm water influent is conditioned to the correct pH to precipitate dissolved iron out of solution. The Treatment System Module injects sodium hydroxide or other chemical to cause both the source of iron and iron in the form of suspended solids to clump together in large enough agglomerations to allow them to be separated by settling and filtration processes.

Step “D” involves pumping the treated storm water into a settling tank equipped with a series of weirs.

Step “E” involves the weirs slowing the water flow to capture settleable solids. By using both an over-weir and an under-weir, the tank creates a more laminar flow pattern that enhances settling of precipitated and flocculated particles, allowing them to more effectively drop out of the water column.

Step “F” involves passing the storm water to the Media Filter Assembly where non-settleable solids will be removed.

Step “G” involves passing the effluent from the Media Filter Assembly to a sampling area inside the Treatment System Module where the treated storm water is then analyzed for turbidity and pH on an on-going, real-time basis. PG&E will correlate iron content to turbidity and pH through bench-scale treatment research and onsite grab sampling and analysis for iron during the startup of the treatment system.

Step “H” involves either pumping the treated storm water to the existing effluent basin where it will be discharged to the San Joaquin River, or if the turbidity and/or pH do not meet the specifications for allowable discharge, the treated storm water will be recirculated to Step “A” for further treatment.

2.2 INSTALLATION PROCEDURES

The system will be delivered in approximately six truckloads. Since the system is pre-packaged, the contractor will simply unload the system at the location shown in Figures 1 and 2. There will be no grading or excavation necessary to install the system. Piping from the existing concrete storm water collection basin will be above ground.

2.3 PROJECT MODIFICATIONS SCHEDULE

PG&E intends to take delivery of the Treatment System in October 2016 in time to collect storm water from the 2016 and 2017 reporting season. Installation will take approximately 1 week.

2.4 PURPOSE AND NEED FOR AMENDMENT

In accordance with the most recent NPDES Industrial General Permit (IGP #2015-0057-DWQ) for storm water discharges, effective July 1, 2016, the GGS is in Level 1 status due to the exceedance of the annual numeric action level (NAL) for iron during the 2015-2016 reporting year. This status requires PG&E to install a storm water treatment solution by January 1, 2017. The iron levels are consistent with historical results but PG&E was not required to treat the storm water until the new NPDES was promulgated in 2015.

PG&E could not have anticipated this NPDES permit revision at the time of original licensing.

Section 3 ENGINEERING ASSESSMENT

This section contains an evaluation of the modifications proposed in this Petition to determine if they would result in modification the findings, conclusions or conditions of certification for each technical discipline included within the Engineering Assessment section of the Final Decision.

3.1 FACILITY DESIGN

3.1.1 Changes in LORS Conformance and Other Permits

There are no changes in Facility Design LORS or required permits necessary to construct and operate the modifications proposed in this Petition.

3.1.2 Conditions of Certification

No modifications to the any of the existing Facility Design conditions of certification are necessary.

3.2 POWER PLANT EFFICIENCY AND RELIABILITY

The proposed modifications do not result in any effect on power plant efficiency or reliability.

3.3 TRANSMISSION SYSTEM ENGINEERING

None of the proposed modifications require changes to the switchyard or the transmission line. Therefore the proposed modifications will have no effect on the findings, conclusions or conditions of certification contained in the Transmission System Engineering section of the Final Decision.

3.4 TRANSMISSION LINE SAFETY AND NUISANCE

None of the proposed modifications require changes to the switchyard or the transmission line. Therefore the proposed modifications will have no effect on findings, conclusions or conditions of certification contained in the Transmission Line Safety and Nuisance section of the Final Decision.

Section 4 PUBLIC HEALTH AND SAFETY

This section contains an evaluation of the modifications proposed in this Petition to determine if they would result in modification to the findings, conclusions or conditions of certification for each technical discipline included within the Public Health and Safety section of the Final Decision.

4.1 AIR QUALITY, GREENHOUSE GASES AND PUBLIC HEALTH

The proposed new storm water treatment system will not result in any measurable emissions during installation or operations. Installation activities will comply with the existing conditions of certification and therefore will not undermine any of the findings and conclusions of the Air Quality, Public Health and Greenhouse Gases sections of the Final Decision.

There are no new Air Quality, Public Heath, or Greenhouse Gases LORS or required permits for the modifications proposed in this Petition.

No modifications to the any of the existing Air Quality and Public Health conditions of certification are necessary.

4.2 HAZARDOUS MATERIALS MANAGEMENT

The modifications proposed in this Petition will not affect the findings and conclusions contained in the Hazardous Materials Management section of the Final Decision as none of the modifications will involve the use of hazardous materials that are not already being used on site. The stormwater treatment system will use a 10 percent solution of sodium hydroxide (NaOH), which is already being used on site. New chemicals will not be stored on-site outside those that will be entirely contained within the treatment system.

4.3 WORKER SAFETY/FIRE PROTECTION

The proposed modifications will not expose workers to any additional risks not evaluated in the Worker Safety/Fire Protection section of the Final Decision. PG&E will require the contractors to comply with its various safety plans during installation of the system.

None of the modifications proposed in this Petition will affect the findings and conclusions of the Final Decision relating to fire protection.

Since the work for all of the proposed modifications will be performed in accordance with the Conditions of Certification, the proposed modifications do not undermine any finding or conclusion of the Worker Safety/Fire Protection section of the Final Decision.

Section 5 ENVIRONMENTAL ANALYSIS

This section contains an evaluation of the modifications proposed in this Petition to determine if they would result in modification to any of the findings, conclusions or conditions of certification for each technical discipline included within the Environmental Assessment section of the Final Decision.

5.1 BIOLOGICAL RESOURCES

Installation of the system will not result in grading or excavation. The proposed location of the system was previously graded during construction and is currently surfaced with gravel and asphalt. Installation of the system will comply with the conditions of certification and therefore will not undermine any of the findings and conclusions of the Biological Resources sections of the Final Decision.

There are no new Biological Resource LORS or required permits for the modifications proposed in this Petition.

Therefore, the proposed modifications described in this Petition do not require changes to the Biological Resources Conditions of Certification.

5.2 SOIL AND WATER RESOURCES

The only potential impact related to water resources is the positive impact of treating the storm water effluent. As described in Section 2.4 of this Petition, the purpose of this Petition is to install a treatment system that will allow compliance with the NPDES IGP. Installation of the treatment system will enable the GGS to comply with 2015 revisions to the NPDES IGP and will not undermine any of the findings or conclusions contained in the Soil and Water Section of the Final Decision. No modification to any Soil and Water Resource condition of certification is necessary.

5.3 CULTURAL RESOURCES

Since the installation will take place within previously graded areas and will not involve grading or excavation, the modifications proposed in this Petition will not have any effect on the findings, conclusions or will not require any modification to the conditions of certification contained in the Cultural Resources Section of the Final Decision.

5.4 GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Since the installation will take place within previously graded areas and will not involve grading or excavation, the modifications proposed in this Petition will not have any effect

on the findings, conclusions or will not require any modification to the conditions of certification contained in the Geological and Paleontological Resources Section of the Final Decision.

5.5 WASTE MANAGEMENT

Operation of the treatment system will generate small amounts of waste.

Periodically, the settling tank(s) will need to be cleaned of flocculated sludge that settled at the bottom of the tank. The sludge will contain any solids (including heavy metals) that were flocculated and filtered out of the process. Based on conversations with the manufacturer, PG&E anticipates that the sludge will be disposed of as non-hazardous waste. Upon first tank cleaning, PG&E will characterize the sludge and dispose of the waste in compliance with all applicable regulatory requirements.

The proposed modifications will not undermine any findings or conclusions of the Waste Management section of the Final Decision. No modifications to the Waste Management conditions of certification are required.

Section 6 LOCAL IMPACT ANALYSIS

This section contains an evaluation of the modifications proposed in this Petition to determine if they would result in modification to any findings, conclusions or conditions of certification for each technical discipline included within the Local Impact Assessment section of the Final Decision.

6.1 LAND USE

The modifications proposed in this Petition will not affect the findings and conclusions contained in the Land Use section of the Final Decision as none of the modifications will involve the use of new land areas.

6.2 NOISE AND VIBRATION

The modifications proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Noise and Vibration section of the Final Decision as none of the modifications will create new sources of noise or vibration.

6.3 SOCIECONOMICS

The modifications proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Socioeconomic Resources section of the Final Decision as none of the modifications will burden existing public services.

6.4 TRAFFIC AND TRANSPORTATION

The modifications proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Traffic and Transportation section of the Final Decision as none of the modifications will significantly increase traffic on local roads.

6.5 VISUAL RESOURCES

The modifications proposed in this Petition will not affect the findings and conclusions, nor require any modifications to the existing conditions of certification, contained in the Visual Resources section of the Final Decision as none of the modifications will create significant visual impacts. The site is already heavily industrialized and the addition of the relatively small pieces of equipment proposed herein will have a negligible effect on views of the GGS.

Section 7 POTENTIAL EFFECTS ON PROPERTY OWNERS

The Commission's Power Plant Siting Regulations require a Petition For Amendment to include 1) a discussion of how the modification affects the public; 2) a list of property owners potentially affected by the modification; and 3) a discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.

As described in technical area evaluated in Sections 3, 4, 5 and 6 of this Petition, with implementation of the existing conditions of certification the impacts of the proposed modifications are less than significant and therefore would not affect the public differently than the identified in the Final Decision.

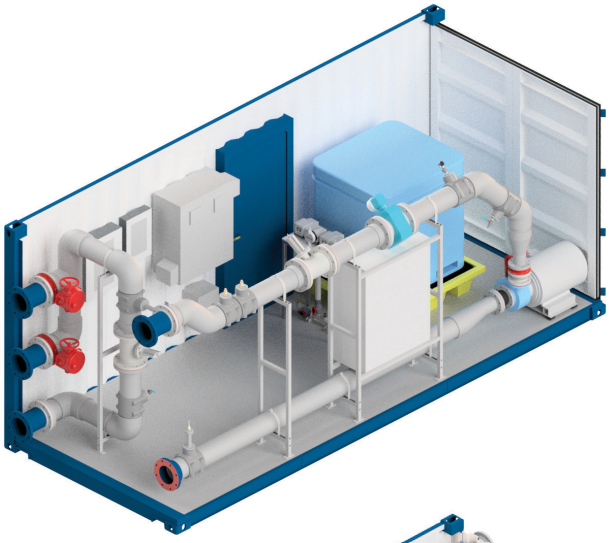
PG&E previously updated the list of property owners within a 1-mile radius of the GGS with its prior Petition For Amendment for the steam deck upgrade filed with the Commission in 2015. If the Commission requires the list to be updated again for this Petition, PG&E will provide an updated list under separate cover.

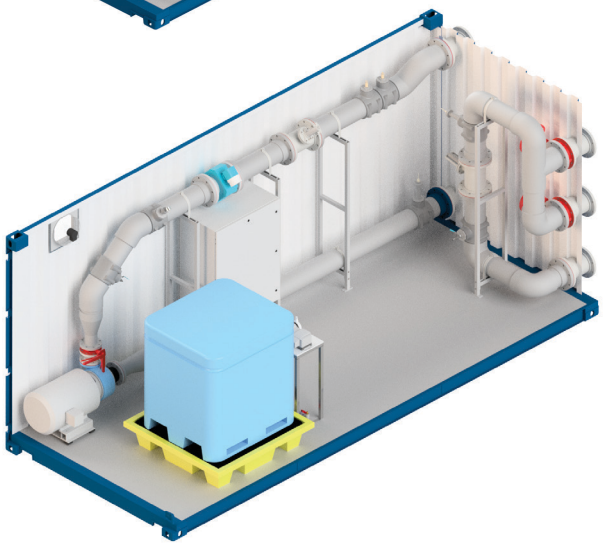
APPENDIX A

Water Treatment Brochure

ACISTBox™

Chemical Treatment System
Fact Sheet



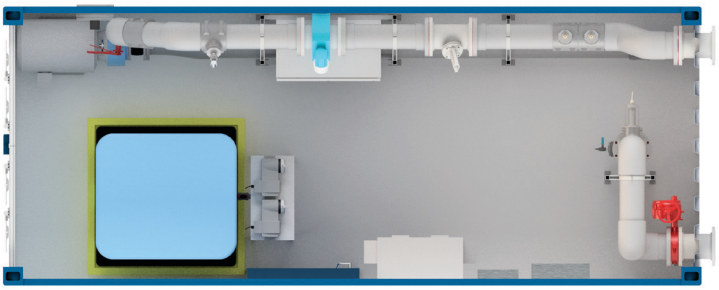


Specific Features

- Industry-leading process technology
- Single-pass, flow-through system
- Scalable treatment chemical dosing
- Multiple injection configurations available
- Programmable Logic Controller (PLC) with 12" touch panel display
- Real-time water quality monitoring and reporting

Additional Available Features

- System status data logging & alerts via email notification
- EagleEye™ web portal for remote status and site management
- Integrated pH management
- Solids separation and filtration incorporated into PLC
- Meets WA State DOE General Use Level Designation (GULD) Requirements



MANUFACTURING STANDARDS

UL508 Electrical Standards

Class 1 Div, Class 2 Div Available

CSA/CE Available

International Voltage Options

CONFIGURATION OPTIONS

Containerized: 50 to 1000gpm

Skidded: 50 to 1000gpm

OPERATING RANGES

Temperate: 32 to 140°F

Conductivity: Up to 100,000+ µs/cm

pH: 2 to 12 s.u.

Target Contaminants: Total Suspended Solids, Heavy Metals, Emulsified Oils, Bacteria, and Sulfides. Please inquire for additional contaminants.

What is Chemical Treatment?

Chemical treatment is a **versatile treatment technology** for targeting the removal of total suspended solids, heavy metals, bacteria and other contaminants from water.

HOW IT WORKS

The AcistBox allows for the in-line injection of water treatment chemicals, such as polymers, ferric chloride, chitosan, caustic and more. This turnkey system centralizes all required treatment components in a single containerized system, significantly reducing installation time and providing safe housing. The AcistBox has been used on construction, remediation and industrial sites across the United States and Canada.

TREATMENT STEPS FOR ULTIMATE EFFECT

Chemical injection can be integrated into new or existing treatment processes. Depending on the application, the final solids separation steps can be accomplished using settling tanks, dissolved air flotation, media filtration, ultrafiltration and other technologies to achieve water quality goals.

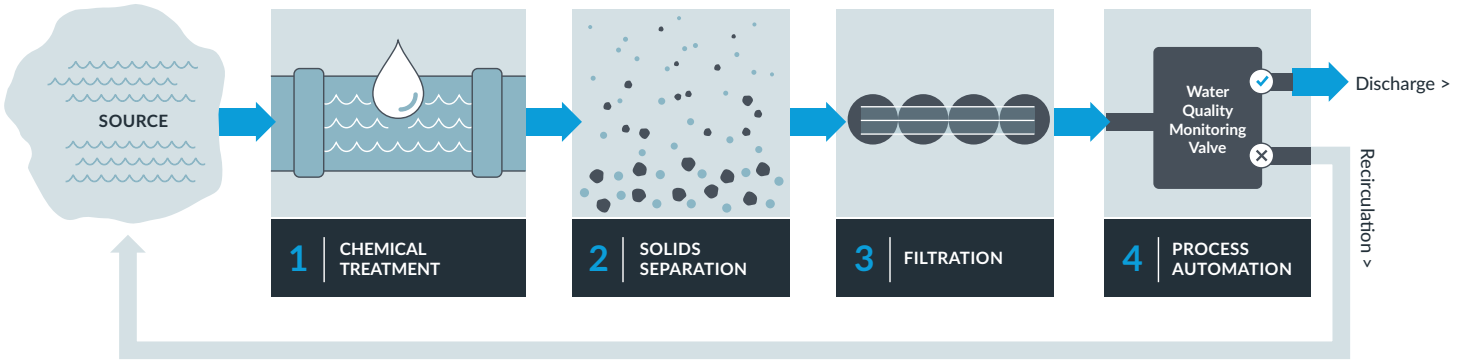


FIGURE 1 - GGS STORMWATER PROJECT SITE PLAN

FIGURE 2 - GGS STORMWATER PROJECT LAYOUT

FIGURE 3 - GGS STORMWATER PROJECT - ACIST TREATMENT SYSTEM SEA VAN MODULE PHOTO

FIGURE 4 - GGS STORMWATER PROJECT - WATERTECTONICS MEDIA FILTER MODULES ASSEMBLY PHOTO