

# **GATEWAY GENERATING STATION AMENDMENT**

(formerly known as the Contra Costa Generating Station)

<b>DOCKET</b>	
<b>00-AFC-1C</b>	
DATE	APR 04 2011
RECD.	APR 04 2011

**MINOR AMENDMENT  
(00-AFC-1C)**

Submitted to the:  
**California Energy Commission**

Submitted by:  
**Pacific Gas and Electric Company**

**APRIL 4, 2011**



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April 4, 2011

California Energy Commission  
Docket Unit  
1516 Ninth Street  
Sacramento, CA 95814-5512

Subject: **Gateway Generating Station Amendment**

**DOCKET NO. (00-AFC-1C)**

Enclosed for filing with the California Energy Commission are one (1) original and twelve (12) copies of the Gateway Generating Station Amendment, for the Gateway Generating Station Power Plant Project (00-AFC-1C).

Sincerely,

/ Original signed /

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David L. Wiseman  
Counsel to PG&E

## **Description of Requested Amendment**

This application for an Amendment of the Gateway Generating Station (GGS) Conditions of Certification is submitted on behalf of Pacific Gas and Electric Company (PG&E) in accordance with the California Energy Commission (CEC) Siting Regulations (Title 20, Cal. Code Regs. section 1769 et seq.). PG&E proposes to modify specific conditions of certification (AQ-20 and AQ-24) in order to reduce (i.e., make more stringent) certain emission limitations specified in the existing license. These amendments are requested in accordance with the Second Amended Consent Decree (Consent Decree) entered by the United States District Court for the Northern District of California on March 3, 2011 in *United States of America v. PG&E*, 2011 U.S. Dist. LEXIS 27022 (N.D. Cal March 3, 2011). Entry of the Consent Decree fully resolved PG&E's alleged non-compliance with federal Prevention of Significant Deterioration requirements under the Clean Air Act, and requires PG&E to request the specific modifications to the CEC license proposed herein.

As required under the Consent Decree, PG&E proposes to modify the Gateway Generation Station (GGS) conditions of certification to include the following reduced emissions limits:

- A NO<sub>x</sub> emission limit of 2.0 ppmv, 1-hour average, 15% O<sub>2</sub> (excluding start-ups and shut-downs)
- An annual NO<sub>x</sub> mass emission limit of 139.2 tpy rolling 12-month average
- An annual SO<sub>2</sub> mass emission limit of 18.5 tpy rolling 12-month average
- A PM<sub>10</sub> emission limit of 7.50 lb/hr without duct burners (0.004 lb/mmBtu) and 9.0 lb/hr with duct burners (0.004 lb/mmBtu)

The requested changes to the air quality conditions and existing license are limited to the emissions limits reductions listed above and do not otherwise involve changes in project design or operation, or new emissions modeling. These proposed modifications are necessary in order to further reduce maximum allowable emissions from the GGS and to ensure consistency between the CEC conditions of certification, the conditions of the operating permits to be issued by the Bay Area Air Quality Management District (BAAQMD), and the court's March 3, 2011 order. As also required under the Consent Decree, PG&E has concurrently requested that the BAAQMD include these same emissions limit reductions in the Permit to Operate and Title V operating permit for the GGS.

PG&E's specifically proposed modifications to the CEC conditions of certification are provided below. The necessity of this Amendment arises out of new information not known to PG&E at the time the GGS was licensed, specifically the Second Amended Consent Decree entered by the United States District Court for the Northern District of California on March 3, 2011.

## **LORS**

The original Commission Decision certifying the Gateway Generating Station and any and all amendments thereafter concluded that the project is in compliance with all applicable laws, ordinances, regulations and standards (LORS). The project, as proposed for modification herein, will be subject to even more stringent emission limits and will continue to comply with all applicable LORS.

## POTENTIAL EFFECTS ON THE PUBLIC

This Amendment proposes only to lower various emission limits of the GGS's conditions of certification. As a result this Amendment will not have any adverse effects on the public, nor does this Amendment have the potential to affect any of the GGS's nearby property owners.

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## PROPOSED MODIFICATIONS TO THE CONDITIONS OF CERTIFICATION

### AQ-20

- (b) The nitrogen oxide emission concentration at emission points P-11 and P-12 each shall not exceed 2.50 ppmv, on a dry basis, corrected to 15% O<sub>2</sub>, averaged over any 1-hour period.
- (i) NO<sub>x</sub> emissions during natural gas combustion turbine start-up mode shall not be included in calculating compliance with the one-hour emissions limit of 2.0 ppmv.
  - (ii) NO<sub>x</sub> emissions during natural gas combustion turbine shutdown mode shall not be included in calculating compliance with the one-hour emissions limit of 2.0 ppmv.
  - (iii) Natural gas combustion start-up mode is the lesser of the first 256 minutes of continuous fuel flow to the natural gas-fired combustion turbine after fuel flow is initiated or the period of time from natural gas-fired combustion turbine fuel flow initiation until the natural gas-fired combustion turbine achieves two consecutive continuous emission monitor data points in compliance with the emission concentration set forth under this condition.
  - (iv) Natural gas combustion turbine shutdown mode is the lesser of the 30 minute period immediately prior to the termination of fuel flow to the natural gas-fired combustion turbine or the period of time from noncompliance with the emission concentration limits set forth under this condition, until termination of fuel flow to the natural gas-fired combustion turbine.
- (h) Particulate matter (PM10) mass emissions at P-11 and P-12 each shall not exceed 147.50 pounds per hour or 0.00588-0.004 lb./MM Btu of natural gas fired when the HRSG duct burners and not in operation. Particulate matter (PM10) mass emissions at P-11 and P-12 each shall not exceed 43 9.0 pounds per hour or 0.00584 0.004 lb./MM Btu of natural gas fired when the HRSG duct burners are in operation.

### AQ-24

Cumulative combined emissions from the Gas Turbines and HRSGs (S-41, S-42, S-43, and S-44), and the Diesel Fire Pump Engine (S-48), including emissions generated during gas turbine start-ups and shutdowns shall not exceed the following limits during any consecutive twelve month period:

- a. 174.3-139.2 tons of NO<sub>x</sub> (as NO<sub>2</sub>) per year
- b. 259.1 tons of CO per year
- c. 46.6 tons of POC (as CH<sub>4</sub>) per year
- d. 105 tons of PM10 per year
- e. 48.5 18.5 tons of SO<sub>2</sub> per year