CALPINE GILROY COGEN, L.P.

P.O. Box 1764
Gilroy, CA 95021-1764

408-847-5328 (Office)

408-847-1088 (Fax)

February 18, 2013

Mr. Craig Hoffman
Compliance Project Manager
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

RE: PETITION TO AMEND COMMISSION DECISION CONDITIONS OF CERTIFICATION DOCKET NO. 84-AFC-4C

Dear Mr. Hoffman:

Pursuant to Section 1769 of the California Energy Commission (CEC) Siting Regulations, Calpine Gilroy Cogen, L.P. ("Gilroy Cogen") hereby submits the attached revised Amendment to Docket No. 84-AFC-4C.

This Amendment requests approval to install Selective Catalytic Reduction ("SCR") systems on the Project's S-101 and S-102 auxiliary boilers. The addition of an SCR system on each boiler will allow the Project to comply with recent changes to the BAAQMD Regulation 9 Rule 7, which establishes new regulations for emissions of nitrogen oxides (NOx) for auxiliary boilers. The amendment is being resubmitted to incorporate various changes to the Conditions of Certification requested by the Bay Area Air Quality Management District.

In an attempt to meet the projects outage schedule, we request that this Amendment be approved at the April 10, 2013 business meeting so that construction can commence.

Please contact me at (925)-570-0849 if you have any questions regarding this submittal.

Sincerely,

Barbara McBride
Director, Environmental Services

Attachment – Revised Amendment No. 3

Calpine Gilroy Cogen

84-AFC-4C

Amendment No. 3

Re-Submitted by
Calpine Gilroy Cogen, L.P.

February 2013

Table of Contents

Page

TABLE OF CONTENTS 2

1.0 INTRODUCTION 3

1.1 OVERVIEW OF AMENDMENT 3
1.2 SUMMARY OF ENVIRONMENTAL IMPACTS 4

2.0 DESCRIPTION OF PROJECT CHANGES 5

2.1 ADDITION OF SELECTIVE CATALYTIC REDUCTION SYSTEMS TO AUXILIARY BOILERS 5
2.2 THE PROPOSED CHANGES TO THE CONDITIONS OF CERTICATION 5
2.3 NECESSITY OF PROPOSED CHANGES 6

3.0 ENVIRONMENTAL ANALYSIS OF THE PROJECT CHANGES 7

3.1 INSTALLATION OF SCR SYSTEMS TO AUXILIARY BOILERS 7
3.1.1 AIR QUALITY 7
3.1.2 BIOLOGICAL RESOURCES 7
3.1.3 CULTURAL RESOURCES 7
3.1.4 GEOLOGY AND PALEONTOLOGY 8
3.1.5 HAZARDOUS MATERIALS MANAGEMENT 8
3.1.6 LAND USE 8
3.1.7 NOISE AND VIBRATION 8
3.1.8 PUBLIC HEALTH 8
3.1.9 SOCIOECONOMICS 8
3.1.10 SOIL AND WATER RESOURCES 8
3.1.11 TRAFFIC AND TRANSPORTATION 8
3.1.12 VISUAL RESOURCES 8
3.1.13 WASTE MANAGEMENT 8
3.1.14 WORKER SAFETY AND FIRE PROTECTION 8
3.2 CONSISTENCY OF AMENDMENT WITH THE CERTIFICATION AND LORS 9

4.0 POTENTIAL EFFECTS ON THE PUBLIC 9

5.0 LIST OF PROPERTY OWNERS 9

5.1 LIST OF PROPERTY OWNERS 9
5.2 POTENTIAL EFFECTS ON PROPERTY OWNERS 10

1.0 Introduction

1.1 Overview of Amendment

Calpine Gilroy Cogen, L.P. ("Gilroy Cogen") operates the Gilroy Cogeneration Project ("Project"), a cogeneration facility located 30 miles south of San Jose in the City of Gilroy. The facility consists of an operational 115 megawatt (MW) (net) natural gas-fired power plant.[1] .

The Commission granted the original license for the Project on November 13, 1985 (hereinafter, "Decision"). The Decision has been amended twice; once in July 2005 to allow the use of recycled wastewater at the Project,[2] and again in April 2011 to modify the Air Quality Conditions of Certification to allow the Project to comply with changes to Bay Area Air Quality Management District ("BAAQMD") Regulation 9, Rule 9.[3]

This Amendment requests approval to install Selective Catalytic Reduction ("SCR") systems on the Project's S-101 and S-102 auxiliary boilers. The addition of an SCR system on each boiler will allow the Project to comply with recent changes to the BAAQMD Regulation 9 Rule 7, which establishes new regulations for emissions of nitrogen oxides (NOx) for auxiliary boilers.

The installation of the SCR systems will not result in any significant adverse effect on the environment. This installation will require minor changes to conditions of certification in the Decision. This installation will allow the Project to continue to comply with all applicable laws, ordinances, regulations or standards. Accordingly, Gilroy Cogen requests that this Amendment be processed as a staff-approved modification pursuant to the Commission's Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769(a)(2), Post-Certification Amendments and Changes).

This Amendment contains all of the information that is required pursuant to the CEC's Siting Regulations (CCR Title 20, § 1769). The information necessary to fulfill the requirements of Section 1769 is contained in Sections 1.0 through 6.0 as summarized in Table 1 below.

---

[1] The Project was originally certified to also allow the use of low-sulfur fuel oil for backup in the event of an emergency natural gas curtailment. (Commission Decision, Doc. No. 84-AFC-4, November 13, 1985.)

[2] Order No. 05-0713-01(b), Order Approving Modifications to Change the Source of Power Plant Cooling Water to Recycled Wastewater, Docket No. 84-AFC-4C, July 13, 2005.

[3] Order No. 11-0406-03, Order Approving a Petition to Install Dry Low Nitrogen Oxide Combustor Unit, Docket No. 84-AFC-4C, April 6, 2011.

TABLE 1
Informational Requirements for Post-Certification Amendments and Changes

Section 1769 Requirement	Section of Petition Fulfilling Requirement
(A) A complete description of the proposed modifications, including new language for any conditions that will be affected	Section 2.0—Proposed modifications Sections 2.2 - Changes to Conditions of Certification
(B) A discussion of the necessity for the proposed modifications	Section 2.3
(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time	Section 3.2
(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted	Sections 3.2
(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts	Section 3.1
(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards;	Section 3.2
(G) A discussion of how the modification affects the public	Section 4.0
(H) A list of property owners potentially affected by the modification	Section 5.1
(I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.	Section 5.2

1.2 Summary of Environmental Impacts

Section 1769 (a)(1)(E) of the Commission's Siting Regulations requires that an analysis be conducted that addresses the impacts a modification might have on the environment and proposed measures to mitigate any significant adverse impacts. In addition, Section 1769 (a)(1)(F) requires a discussion of the impacts that a modification might have on the project's ability to comply with applicable laws, ordinances, regulations and standards (LORS). Section 3.0 of this Amendment addresses potential environmental impacts and consistency of this Amendment with LORS. Because the proposed physical change to the Project will result in a decrease in NOx emissions and allows the Project to comply with recent changes to BAAQMD regulations, Section 3.0 concludes that this Amendment will not result in adverse environmental impacts and that the Project, as modified, will comply with applicable LORS.

2.0 Description of Project Changes

Consistent with California Energy Commission Siting Regulations Section 1769 (a)(1)(A) and 1769(a)(1)(B), this section includes a complete description of the physical changes being proposed to the Project, as well as the necessity for this Amendment.

2.1 Addition of Selective Catalytic Reduction Systems to Auxiliary Boilers

This Amendment requests authorization to install an SCR system on each of the facility's two auxiliary boilers, S-101 and S-102. This installation will allow the Project to comply with BAAQMD and State Implementation Plan ("SIP") revisions to Regulation 9, Rule 7 "Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters."

The S-101 and S-102 auxiliary boilers are subject to Regulation 9, Rule 7, which establishes a new limit of 5 ppmv @ 3% O2 of NOx. With installation of the new SCR systems, emissions from the S-101 and S-102 auxiliary boilers will achieve a NOx limit of 5 ppmvd.

An SCR system will be installed in the exhaust flow path of each of the two natural-gas fired steam boilers. The installation will occur in a vertical section of the flue gas duct, downstream of the main boiler section but upstream of the economizer. The installation will include the SCR systems, ammonia flow control units (AFCU's), ammonia vaporization equipment, replacement of ammonia forwarding pumps, interconnecting piping, power, control systems, emissions monitoring systems and all other ancillary components. The ammonia supply for the SCR's will be from an existing aqueous ammonia tank located on the Project site.

This modification will result in positive, rather than negative air quality impacts because there will be no emissions increase associated with this Project change; there will be a decrease in NOx emissions.

2.2 The Proposed Changes to Conditions of Certification

The following Conditions of Certification will be added to the Gilroy Cogen Decision. These conditions have been proposed by BAAQMD. Condition of Certification 01-04 will be deleted from the Decision. Any condition set forth below that is preceded by an asterisk, has been noted by BAAQMD as not federally enforceable.

1. *Within 60 days of startup of each SCR, the owner/operator shall ensure that the nitrogen oxide (NOx) emissions from each auxiliary boiler (S-101, S-102) do not exceed 5 ppmvd at 3% oxygen averaged over any one-hour period, except during periods during startup and shutdown. (Basis: Regulation 9-7-307.6)

2. *The owner/operator shall monitor NOx from each boiler with a District approved CEM system. (Basis: Regulation 1-521, 2-1-403)

3. *Within 60 days of startup of each SCR, the owner/operator shall ensure that the ammonia (NH3) emission concentration at each exhaust point of S-101 and S-102 does not exceed 10 ppmv, on a dry basis, corrected to 3% O2, as measured with a District approved method, except during periods of startup and shutdown. (Basis: Regulation 2, Rule 5)

4. *Within 90 days of startup, the owner/operator shall have a District approved source test conducted for ammonia at the exhaust point of S-101 and S-102 and on an annual basis thereafter. The owner/operator shall submit the results of the District approved source test to the District Source Test Section within 60 days of the source test date. (Basis: Regulation 2, Rule 5)

5. *S-101 and S-102 shall not operate more than 15,800 hours combined on a 12-month rolling average basis. (Basis: Regulation 2, Rule 5, Regulation 2-1-403)

6. *The owner/operator of S-101 and S-102 shall maintain records of hours of operation on a 12-month rolling average basis, fuel usage, the duration of each startup and shutdown event including emissions of NOx and CO during each event, all CEM data, and source test records in a District-approved log. These records shall be retained on site for a minimum of five years from the date of entry and made available to District representatives upon request. (Basis: Regulation 2-6-501, Regulation 9-7-307.6)

~~7.~~ 01-04 ~~Nitrogen oxixe (NOx) emissions from each auxiliary boiler (S-101, S-102) shall not exceed 40 ppmvd at 3 percent oxygen averaged over any three hour period.~~

2.3 Necessity of Proposed Changes

The change to the Project's design is necessary to ensure compliance with BAAQMD's revisions to Regulation 9, Rule 7. For facilities that must install new control equipment, the BAAQMD deadline to comply with the lower NOx emission limits is the next scheduled major maintenance or January 1, 2014, whichever is earlier. Gilroy Cogen currently plans to install the SCR systems during the next major maintenance event, scheduled for Spring 2013.

3.0 Environmental Analysis of the Project Changes

The proposed Project changes are evaluated below according to the type of change. Within each of the following sections, an environmental analysis for each of the 14 different discipline areas addresses whether there are any significant potential changes to environmental impacts of the project that are a result of this Amendment. Each section includes an environmental analysis. The environmental disciplines are addressed, as follows:

3.1 AIR QUALITY
3.2 BIOLOGICAL RESOURCES
3.3 CULTURAL RESOURCES
3.4 GEOLOGY AND PALEONTOLOGY
3.5 HAZARDOUS MATERIALS MANAGEMENT
3.6 LAND USE
3.7 NOISE AND VIBRATION
3.8 PUBLIC HEALTH
3.9 SOCIOECONOMICS
3.10 SOIL AND WATER RESOURCES
3.11 TRAFFIC AND TRANSPORTATION
3.12 VISUAL RESOURCES
3.13 WASTE MANAGEMENT
3.14 WORKER SAFETY AND FIRE PROTECTION

At the end of this section, the Amendment addresses the consistency of the proposed physical changes to the Project's auxiliary boilers.

3.1 Installation of SCR Systems to Auxiliary Boilers

3.1.1 Air Quality

The installation of an SCR system on each auxiliary boiler will have a positive impact on air quality. Installation of the SCR systems allow the Project to meet the new emissions limit of 5 ppmv @3% O2 of NOx. The installation of the SCR systems will result in a slight increase in ammonia emissions due to the ammonia slip associated with SCR systems. Even with this slight increase, the ammonia emissions will remain in compliance with the Decision and the BAAQMD permit.

3.1.2 Biological Resources

The addition of the SCR systems proposed in this Amendment will have no impact on biological resources.

3.1.3 Cultural Resources

The addition of the SCR systems proposed in this Amendment will have no impact on cultural resources.

3.1.4 Geology and Paleontology

The addition of the SCR systems proposed in this Amendment will have no impact on geological resources or paleontological resources.

3.1.5 Hazardous Materials Management

The addition of the SCR systems will not result in changes to the chemical inventory and quantities of chemicals needed for the Project. While the SCR systems will require the use of aqueous ammonia, the ammonia is already located on the Project site and use of the ammonia does not conflict with conditions of the Decision.

3.1.6 Land Use

The addition of the SCR systems will not result in changes to the Decision's conditions, findings or conclusions regarding land use.

3.1.7 Noise and Vibration

The addition of the SCR systems will not result in changes to the Decision's conditions, findings or conclusions regarding noise.

3.1.8 Public Health

The addition of the SCR systems will not impact Public Health.

3.1.9 Socioeconomics

The addition of the SCR systems will have no effect on socioeconomics.

3.1.10 Soil and Water Resources

The addition of the SCR systems will not impact soil and water resources.

3.1.11 Traffic and Transportation

The addition of the SCR systems will not impact traffic.

3.1.12 Visual Resources

The addition of the SCR systems will not impact visual resources.

3.1.13 Waste Management

The addition of the SCR systems will not change or impact waste management practices or the types or quantities of waste generated by the construction or operation of the Project.

3.1.14 Worker Safety and Fire Protection

The addition of the SCR system will not result in any impacts different than those analyzed by the Commission during certification, and the proposed changes do not affect the Commission Decision's conditions, findings or conclusions regarding worker safety and fire protection.

3.2 Consistency of Amendment with the Certification and LORS

The CEC Siting Regulations require a discussion of the consistency of the proposed project revision with the applicable laws, ordinances, regulations, and standards (LORS) and whether the modifications are based upon new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision (Title 14, CCR Section 1769 [a][1][D]). If the project is no longer consistent with the certification, the petition for project change must provide an explanation for why the modification should be permitted.

The need to install the SCR systems on the Project's two auxiliary boilers is triggered by the recent changes to BAAQMD Regulation 9, Rule 7 and information evaluated after the completion of the certification process during the operational phase of the Project. Because these changes ensure compliance with BAAQMD Regulation 9, Rule 7, they are consistent with the intent of the 1985 Decision and do not undermine the assumptions, rationale, findings or other bases of the final decision.

This Amendment is consistent with all applicable LORS and is not based on new information that changes or undermines any bases for the final decision.

4.0 Potential Effects on the Public

Consistent with the requirements of the Commission Siting Regulations Section 1769 (a)(1)(G), this section addresses the proposed Amendment's effects on the public.

Addition of the SCR systems to the Project's auxiliary boilers does not adversely affect the public. The SCR systems will reduce the NOx emissions for the Project, and this will have a beneficial impact on air quality and public health.

5.0 List of Property Owners

5.1 List of Property Owners

In accordance with the CEC Siting Regulations (Title 20, CCR, Section 1769[a][1][H]), the project owner shall provide the Compliance Project Manager for the project a list of all property owners whose property is located within 500 feet of the project. This list shall be provided under separate cover.

5.2 Potential Effects on Property Owners

This section addresses potential effects of the project changes proposed in this Amendment on nearby property owners, the public, and parties in the application proceeding, per CEC Siting Regulations (Title 20, CCR, Section 1769 [a][1][I]).

As described in this Amendment, there would be no significant adverse environmental impacts from the addition of the SCR systems to the auxiliary boilers. All work to install the SCR systems on the auxiliary boilers will take place within the property boundaries of the Project site. Accordingly, the Amendment will not affect nearby property owners, and no significant adverse effects on property owners would result from the adoption of the changes proposed in this Amendment.