

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:)	
INLAND EMPIRE ENERGY CENTER)	Docket No. 01-AFC-17C
)	
INLAND EMPIRE ENERGY)	Order No. 05-0622-03
CENTER, LLC)	ORDER APPROVING a Petition to Change
)	to GE 107H Combined-Cycle Systems and
)	add secondary laydown/parking areas.

Inland Empire Energy Center, LLC (IEEC), the owner/operators of the Inland Empire Energy Center Power Project (Project), has requested to modify the Project by changing the previously-approved power generation configuration consisting of two GE Frame 7 combustion turbine-generators. The proposed new configuration would consist of two GE 107H combined-cycle systems (H System). The H System represents GE's latest gas turbine technology providing superior fuel economy and environmental performance. This proposed modification would require changes to the site layout concerning location of structures and add approximately four acres to the fenced area of the project site.

In addition, IEEC requests to add two temporary areas near the project site for construction worker parking and secondary laydown. The additional 11.5 acres will allow for a more efficient use of the project site during construction and safer, more cost-effective construction staging.

The South Coast Air Quality Management District (SCAQMD) published a Preliminary Determination of Compliance (DOC) on June 1, 2005. It is possible that SCAQMD may revise the conditions in the Final DOC, depending on comments, if any, they receive during their public review process which ends on July 1, 2005.

STAFF RECOMMENDATION

The Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of IEEC's petition to modify the Inland Empire Energy Center Project and amend related Conditions of Certification.

COMMISSION FINDINGS

Based on staff's analysis, the Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications.

- The modification will not change the findings in the Commission's Final Decision pursuant to Title 20, section 1755.
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525.
- There will be no new or additional unmitigated significant environmental impacts associated with the proposed changes.
- The change will be beneficial to the project owner by increasing operational efficiencies and enhancing the project's economics. Moreover, the change will be beneficial to the State of California by increasing power in an area of need (Southern California).
- There has been a substantial change in circumstances since the Commission certification justifying the change. The H System represents GE's latest gas turbine technology providing superior fuel economy and environmental performance.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Inland Empire Energy Center Project's Decision. New language is shown as **bold** and double **underlined** and deleted language is shown in ~~strikeout~~:

Staff Air Quality Conditions of Certification – Operation

AQ-SC8 The project owner shall submit to the CPM and District Executive Officer Quarterly Operation Reports, no later than 30 days following the end of each calendar quarter, that include operational and emissions information as necessary to demonstrate compliance with Conditions **AQ-SC11, AQ-SC12, AQ-SC14, AQ-SC15, AQ-SC17, and AQ-1** through **AQ-57**, as applicable. The Quarterly Operation Report will specifically note or highlight incidences of noncompliance.

Verification: The project owner shall submit the Quarterly Operation Reports to the CPM and APCO no later than 30 days following the end of each calendar quarter.

AQ-SC9 The project owner shall provide emission reduction credits to offset turbine, ~~duct burner~~, auxiliary boiler, and **standby**/emergency equipment NO_x, CO, VOC, SO_x, and PM₁₀ emissions in the form and amount required by the District. RECLAIM Trading Credits (RTCs) shall be provided for NO_x as necessary to demonstrate compliance with **AQ-27, and AQ-47, AQ-51, and AQ-52**. Emission reduction credits (ERCs) shall be provided for CO (~~823~~ **822** lb/day, includes offset ratio of 1.2) and VOC (~~340~~ **307** lb/day, includes offset ratio of 1.2). Emission reduction credits for SO_x (~~81~~ **91** lb/day) and PM₁₀ (~~504~~ **503** lb/day) shall be obtained from the SCAQMD Priority Reserve.

The project owner shall surrender the ERCs for CO and VOC from among those that are listed in the table below or a modified list, as allowed by this condition. If additional ERCs are submitted, the project owner shall submit an updated table including the additional ERCs to the CPM. The project owner shall request CPM approval for any substitutions, modifications, or additions of credits listed.

Prior to commencement of construction, the project owner shall obtain sufficient RTCs to satisfy the District's requirements for the first year of operation.

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, the requested change(s) will not cause the project to result in a significant environmental impact, and the District confirms that each requested change is consistent with applicable federal and state laws and regulations. The CPM may also consult the U.S. EPA to determine compliance of credits.

<u>Pollutant</u>	<u>Quantity</u>	<u>(units)</u>	<u>ERC# or Offset Strategy</u>
NO _x	38,234	lb	2005-2010, Coastal, Zone 1
NO _x	452,359 <u>322,988</u>	lb	2006-2010+, Coastal Zone 1, Coastal <u>Inland</u> Zone 2 (as listed in Ex. 2, p. 5.1-54.)
CO	677	lb/day	#AQ003178
CO	144	lb/day	#AQ004233
CO	3	lb/day	#AQ004222
CO	2	lb/day	#AQ004417
VOC	340 <u>307</u>	lb/day	#AQ003069
PM ₁₀	504 <u>503</u>	lb/day	Through Priority Reserve.
<u>SO_x</u>	<u>14</u>	<u>lb/day</u>	<u>#AQ005311</u>
SO _x	84 <u>79</u>	lb/day	Through Priority Reserve.

Verification: The project owner shall submit to the CPM records showing that the project's offset requirements have been met 15 days prior to initiating construction for Priority Reserve credits **and RTCs**, and 30 days prior to turbine first fire for traditional ERCs. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and commission docket. The CPM shall maintain an updated list of approved ERCs for the project.

AQ-SC10 If the project owner uses Priority Reserve Credits to satisfy District ERC requirements, the project owner shall comply with all applicable requirements of SCAQMD Rule 1309.1 governing the use of such credits. Note: Nothing in this condition shall waive the requirements of Section 1720.3 of the Commission's regulations.

Verification: Within 15 days of becoming operational, the project owner shall submit to the District and CPM documentation substantiating that the requirements of SCAQMD Rule 1309.1 and Section 1720.3 of the Commission's regulations have been met.

AQ-SC11 The project owner shall perform quarterly cooling tower recirculating water quality testing **for each cooling tower**, or shall provide for continuous monitoring of conductivity as an indicator, for total dissolved solids content. The project owner shall also provide a flow meters to determine the daily cooling tower circulating water flow **for each cooling tower**.

Verification: The project owner shall submit to the CPM cooling tower recirculating water quality tests or a summary of continuous monitoring results and daily recirculating water flow in the Quarterly Operation Report (AQ-SC8). If the project owner uses continuous monitoring of conductivity as an indicator for total dissolved solids content, the project owner shall submit data supporting the calibration of the conductivity meter and the correlation with total dissolved solids content at least once each year in a Quarterly Operation Report (AQ-SC8).

AQ-SC12 The cooling tower daily PM₁₀ emissions shall be limited to ~~79~~42 lb/day per cooling tower. ~~The~~ Each cooling tower shall be equipped with a drift eliminator to control the drift fraction to 0.0005 percent of the circulating water flow. The project owner shall estimate daily PM₁₀ emissions from ~~the~~ each cooling tower using the water quality testing data or continuous monitoring data and daily circulating water flow data collected on a quarterly basis.

Verification: The project owner shall submit to the CPM daily cooling tower PM₁₀ emission estimates in the Quarterly Operation Report (AQ-SC8).

AQ-SC13 The project owner shall minimize emissions of carbon monoxide and nitrogen oxides from the gas turbines ~~and duct burners~~ to the maximum extent possible during the commissioning period. During the commissioning period, the project owner shall limit the combined CO emission rate for the two gas turbines to 794.2 lb/hr (777 lb/hr commissioning plus 17.2 lb/hr baseload) and limit the combined NOx emission rate for the two gas turbines to 605.8 lb/hr (587 lb/hr commissioning plus 18.8 lb/hr baseload) Commissioning tests for one gas turbine shall not be conducted simultaneously with commissioning tests for the other.

Verification: See the verification for Condition AQ-17.

AQ-SC14 The project owner shall limit emissions during startup periods. During startup periods, so that the project owner shall limit the combined CO emission rate for the two gas turbines to 190 lb/hr (95 lb/hr for each) and limit the combined NOx emission rate for the two gas turbines to 816 lb/hr (408 lb/hr for each) startup of a gas turbine shall only occur when the other turbine is not in a startup mode.

Verification: See the verification for Condition ~~AQ-17~~18.

AQ-SC15 The gas turbines ~~and duct burners~~ shall be fired on natural gas that results in emissions of less than 1.83 lb/hr SOx for each gas turbine ~~and duct burner pair~~, averaged over three hours.

Verification: The project owner shall compile hourly SOx emissions data for each gas turbine ~~and duct burner pair~~. The hourly emission data shall be calculated using the emission factor specified in Condition AQ-13. The emissions data shall be submitted to the CPM in the Quarterly Operation Report (AQ-SC8).

AQ-SC16 The project owner shall install and operate the equipment so that it does not exceed the emission limits set forth in the Equipment Description portion of Section H of the facility permit issued by the District. The current Equipment Description, as shown in the

Addendum to the Final May 2005 Determination of Compliance, is attached as **Attachment Air Quality 1 – AQ-SC16, Equipment Description.**

Verification: The project owner shall submit to the CPM emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**). The project owner shall submit to the CPM all permit changes, whether initiated by the project owner or the District, pursuant to Condition **AQ-SC7.g**

~~AQ-SC17 The project owner shall report to the CPM the quantity of CO₂ emitted on an annual basis as a direct result of facility electricity production.~~ **If the Project owner does not voluntarily participate in the California Climate Action Registry then the Project owner shall report to the CPM the quantity of CO₂ emitted on an annual basis as a direct result of facility electricity production.**

Verification: Any CO₂ emissions that are reported by the project owner to the California Climate action Registry or pursuant to this condition shall be reported to the CPM **once each year as part of the fourth Quarterly Air Quality Reports required by Condition of Certification AQ-SC8.** ~~at least once each year in a Quarterly Air Quality Report (AQ-SC8).~~

District Conditions Of Certification – Determination of Compliance

Facility Conditions

AQ-1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

- (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition. (SCAQMD F9-1)

Verification: The project owner shall document any known opacity violations in the Quarterly Operation Report (**AQ-SC8**). The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Commission.

AQ-2 ~~The operator shall not use diesel fuel containing sulfur compounds in excess of 0.05 percent by weight. (SCAQMD F14-1)~~ **The equipment is subject to the applicable requirements of the following rules or regulations:**

Within 6 months of permit issuance, the facility will sign a Memorandum of Understanding with the U.S. Forest Service to participate in a visibility monitoring project, the results of which will be used to establish a visibility baseline in nearby Class 1 Areas. (SCAQMD E193-3)

Verification: The project owner shall make fuel purchase, MSDS or other fuel supplier records containing diesel fuel sulfur content the U.S. Forest Service Memorandum of Understanding available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-3 The operator shall not purchase or burn diesel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

~~This condition shall become effective on or after June 1, 2004. (SCAQMD F14-21)~~

Verification: The project owner shall make fuel oil purchase, MSDS or other fuel supplier records containing diesel fuel sulfur content available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-4 Accidental release prevention requirements of Section 112(r)(7):

- a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the SCAQMD Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
- b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency. (SCAQMD F24-1)

Verification: The project owner shall submit to the District and the CPM the documents listed above as part of an annual compliance certification.

Gas Turbines, ~~Duct Burners~~, and SCR

Conditions of Certification AQ-5 through AQ-28 apply individually to each turbine/HRSG unit unless otherwise identified.

AQ-5 The operator shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-1)

Verification: The project owner shall make the site available for inspection of the ammonia flow meter and ammonia flow records by representatives of the District, CARB and the Commission.

AQ-6 The operator shall install and maintain a temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-2)

Verification: The project owner shall make the site available for inspection of the temperature gauge on the inlet to the SCR and the continuous temperature records by representatives of the District, CARB and the Commission.

AQ-7 The operator shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-3)

Verification: The project owner shall make the site available for inspection of the SCR catalyst bed differential pressure gauge and the differential pressure records by representatives of the District, CARB and the Commission.

AQ-8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NO _x emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG <u>VOC</u> emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the gas turbines ~~and steam turbine~~ generating output in MW.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

~~The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.~~ For natural gas fired turbines only the VOC test shall use, ~~this shall be demonstrated by~~ the following test method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400 - 500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees F.

The use of this alternative VOC test method ~~does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except~~ is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. Because the BACT level was set using data derived from various source test methods, this alternate method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

The test shall be conducted ~~with and without duct firing~~ when this equipment is operating at loads of 100, 75, and 50 percent of maximum load for the NO_x, CO, ~~ROG~~ VOC, PM, and ammonia tests. ~~For all other pollutants, the test shall be conducted with and without duct firing at 100% load only.~~ (SCAQMD D29-1)

Verification: The project owner shall submit the proposed protocol for the initial source tests 45 days prior to the proposed source test date to the District for approval and to the CPM for review. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time. The project owner shall submit source test results no later than 60 days following the initial source test date to both the District and CPM.

AQ-9 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG <u>VOC</u> emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR

The test(s) shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted ~~1) when the gas turbine and the duct burners are operating simultaneously at 100 percent of maximum heat input and 2) when the gas turbine is operating alone at 100 percent of maximum heat input.~~

~~The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.~~ For natural gas fired turbines only, the VOC test shall use ~~this shall be demonstrated by~~ the following test method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400 - 500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees F.

The use of this alternative method is solely ~~does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except~~ for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. Because the BACT level was set using data derived from various source test methods, this alternate method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results must be reported with two significant digits.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limit. (SCAQMD D29-2)

Verification: The project owner shall submit the proposed protocol for the triennial source tests 45 days prior to the proposed source test date to the District for approval and to the CPM for review. The project owner shall notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-10 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NO_x concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NO_x emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit. (SCAQMD D29-3)

Verification: The project owner shall submit the proposed protocol for the ammonia slip source tests 30 days prior to the proposed source test date to the District for approval and to the CPM for review. The project owner shall notify the District and CPM no later than ten days prior

to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-11 The operator shall provide to the District a source test report (see **AQ-8**, **AQ-9**, and **AQ-10**) in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF and in terms of lbs/MMBtu.

All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted. (SCAQMD K40-1)

Verification: See verifications for Conditions **AQ-8**, **AQ-9**, and **AQ-10**.

AQ-12 The operator shall not use natural gas containing the following specified compounds:

Compound	Grains per 100 scf
H ₂ S	Greater than 0.25

This concentration limit is an annual average based on monthly sample of natural gas composition or gas supplier documentation. (SCAQMD B61-1)

Verification: The project owner shall submit to the CPM and APCO turbine fuel data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-13 The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	9,728 <u>9,960</u> LBS IN ANY 1 MONTH
PM ₁₀	7,440 LBS IN ANY 1 MONTH
ROG <u>VOC</u>	3,769 <u>4,188</u> LBS IN ANY 1 MONTH
SO _x	1,362 <u>1,197</u> LBS IN ANY 1 MONTH

For the purpose of this condition, the limits shall be based on the ~~combined~~ emissions from each gas turbine ~~and its associated duct burners~~.

The operator shall calculate the emissions by using monthly fuel use data and the following emission factors: PM₁₀ ~~with duct burners firing 4.23~~3.91 lbs/mmsecf, ~~PM₁₀ without duct burners firing 5.01 lbs/mmsecf~~, ~~ROG~~ VOC ~~with duct burners firing 2.55~~1.79 lbs/mmsecf, ~~ROG without duct burners firing 1.41 lbs/mmsecf~~, SO_x 0.71 lbs/mmsecf ~~with and without duct burner firing~~.

The operator shall calculate the emissions for CO, during the commissioning period, using fuel consumption data and the following emission factor: ~~127.87~~22.19 lb/mmsecf.

~~The operator shall calculate the emissions for CO, after the commissioning period and prior to the CO CEMS certification, using fuel consumption data and the following emission factor: 19.76 lbs/mmsecf.~~

The operator shall calculate the emissions for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. (SCAQMD A63-1)

Verification: The project owner shall submit to the CPM and APCO turbine emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-14 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period. (SCAQMD K67-1)

Verification: The project owner shall make the site available for inspection of the commissioning period natural gas usage data by representatives of the District, CARB and the Commission.

AQ-15 The operator shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

~~—The CEMS shall be installed and in operation and Rule 218 testing submitted to the AQMD at the conclusion of the turbine commissioning period prior to base load commercial operation. (SCAQMD D82-1)~~

Verification: **The CEMS shall be installed and in operation and Rule 218 testing submitted to the AQMD at the conclusion of the turbine commissioning period prior to base load commercial operation.** The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-16 The operator shall install and maintain a CEMS to measure the following parameters:

NO_x concentration is expressed in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the turbine startup date, the operator shall provide written notification to the District of the exact date of start-up.

~~The CEMS shall be in operation and Rule 2012 provisional RATA testing submitted to the AQMD at the conclusion of the turbine commissioning period prior to base load commercial operation. (SCAQMD D82-2)~~

Verification: **The CEMS shall be in operation and Rule 2012 provisional RATA testing submitted to the AQMD at the conclusion of the turbine commissioning period prior to base load commercial operation.** The project owner shall provide the CPM documentation of

the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-17 The 68.26 lbs/mmscf 2.0 ppm-NO_x emission limit(s) shall ~~not~~ only apply during turbine commissioning, startup, and shutdown periods. ~~Startup/shutdown time shall not exceed four hours per day per gas turbine. The commissioning period per gas turbine shall not exceed 636 operating hours from the date of initial start up. The operator shall provide the AQMD with written notification of the start up date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD. (SCAQMD A99-1)~~

Verification: The project owner shall submit, commencing one month from the time of gas turbine first fire, a monthly commissioning status report throughout the duration of the commissioning phase that demonstrates compliance with this condition and the emission limits of Condition **AQ-13**. The monthly commissioning status report shall include criteria pollutant emission estimates for each commissioning activity and total commissioning emission estimates. The monthly commissioning status report shall be submitted to the CPM until the report includes the completion of the initial commissioning activities. ~~The project owner shall provide start up and shutdown occurrence and duration data as part as part of the Quarterly Operation Report (AQ-SC8).~~ The project owner shall make the site available for inspection of the commissioning and start up/shutdown records by representatives of the District, CARB and the Commission.

AQ-18 The operator shall operate and maintain this equipment according to the following requirements:

The commissioning period shall not exceed 509 hours of operation for both turbines during the first 180 calendar days from the date of initial start-up.

Startup/shutdown time shall not exceed 4 hours per day per gas turbine, except for a cold startup which shall not exceed 6 hours per day per gas turbine. For purposes of this condition a cold startup shall be defined as a startup of the gas turbine after 72 hours of non-operation.

Startup emissions shall not exceed 125 lbs/hr NO_x and 50 lbs/hr CO averaged for the duration of the startup.

Monthly startup/shutdown time shall not exceed 31 hours. Shutdown time does not include non-operation time.

The operator shall provide the AQMD with written notification of the initial startup date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD. (SCAQMD E193-2)

AQ-18 ~~The 3.0 ppm CO emission limit(s) shall not apply during turbine commissioning, startup, and shutdown periods. Startup/shutdown time shall not exceed four hours per day per gas turbine. The commissioning period per gas turbine shall not exceed 636 operating hours from the date of initial start up. The operator shall provide the AQMD with written notification of the initial start up date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD. (SCAQMD 99-2)~~

Verification: See verification of Condition ~~AQ-17~~. The project owner shall submit to the CPM the final commissioning status report as in Condition AQ-17. The project owner shall provide startup and shutdown occurrence, duration, and emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8). The project owner shall make the site available for inspection of the commissioning and start-up/shutdown records by representatives of the District, CARB and the Commission.

AQ-19 The ~~14.03~~ 7.36 lbs/mmcsf NO_x emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. ~~The interim period shall not exceed 12 months from the initial startup date~~ after the commissioning period. (SCAQMD ~~A~~99-3)

Verification: The project owner shall submit to the CPM and APCO turbine emissions data demonstrating compliance with this condition through the use of the required RECLAIM emission factor, as appropriate, as part of the Quarterly Operation Report (AQ-SC8).

AQ-20 For the purpose of the following conditions continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour. (SCAQMD E179-1)

Condition **AQ-5** (SCAQMD D12-1)

Condition **AQ-6** (SCAQMD ~~179-1~~ D12-2)

Verification: See verifications for Conditions **AQ-5** and **AQ-6**.

AQ-21 For the purpose of the following condition continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month. (SCAQMD E179-2)

Condition **AQ-7** (SCAQMD ~~179-2~~ D12-3)

Verification: See verification for Condition **AQ-7**.

AQ-22 The 2.0 ppmv NO_x emission limit is averaged over 1 hour at 15 percent oxygen, dry basis. The limit shall not apply to turbine commissioning, startup and shutdown periods. The limit shall not apply to the first fifteen 1-hour average NO_x emissions above 2.0 ppmv, dry basis at 15% O₂, in any rolling 12-month period for each combustion gas turbine provided that it meets all of the following requirements:

- A. This equipment operates under any one of the qualified conditions described below:
 - a) Rapid combustion turbine load changes due to the following conditions:
 - Load changes initiated by the California ISO or a successor entity when the plant is operating under Automatic Generation Control; or
 - Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load
 - b) The first two 1-hour reporting periods following the initiation/shutdown of a ~~fogging~~ inlet air cooling system injection pump

- e) ~~The first two 1-hour reporting periods following the initiation/shutdown of combustion turbine steam injection~~
 - d) ~~The first two 1-hour reporting periods following the initiation of HRSG duct burners~~
 - e) Events as the result of technological limitation identified by the operator and approved in writing by the AQMD Executive Officer or his designees
- B. The 1-hour average NO_x emissions above 2.0 ppmv, dry basis at 15% O₂, did not occur as a result of operator neglect, improper operation or maintenance, or qualified breakdown under Rule 2004(i).
- C. The qualified operating conditions described in (A) above are recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 p.m. the next business day following the qualified operating condition. The notations in the log and CEMS must describe the date and time of entry into the log/CEMS and the plant operating conditions responsible for NO_x emissions exceeding the 2.0 ppmv 1-hour average limit.
- D. The 1-hour average NO_x concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O₂.

All NO_x emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit.
(SCAQMD A195-1)

Verification: The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-23 The 3.0 ppmv CO emission limit is averaged over 1 hour at 15 percent oxygen, ~~dry basis when the HRSG duct burners are not operating. The 4.0 ppmv CO emission limit is averaged over 1 hour at 15 percent oxygen, dry basis when the HRSG duct burners are operating.~~ **This limit shall not apply to turbine commissioning, startup and shutdown periods.** (SCAQMD A195-2)

Verification: The project owner shall submit to the CPM and APCO turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-24 The 2.0 ppmv ~~ROG~~ **VOC** emission limit is averaged over 1 hour at 15 percent oxygen, dry basis. **This limit shall not apply to turbine commissioning, startup and shutdown periods.** (SCAQMD A195-3)

Verification: See verifications for Conditions **AQ-8** and **AQ-9**.

AQ-25 The 5 ppmv NH₃ emissions limit is averaged over 1 hour at 15 percent oxygen, dry basis. (SCAQMD A195-67)

Verification: See verification for Conditions **AQ-8**, **AQ-10**, and **AQ-26**.

AQ-26 The operator shall install, operate, and maintain an approved Continuous Emission Monitoring Device, approved by the Executive Officer, to monitor and record ammonia concentrations, and alert the operator (via audible or visible alarm) whenever ammonia concentrations are near, at, or in excess of the permitted ammonia limit of 5 ppmv, corrected to 15% oxygen. It shall continuously monitor or calculate, and record the following parameters:

- Ammonia concentration, uncorrected in ppmv
- Oxygen concentration in percent
- Ammonia concentration in ppmv, corrected to 15% oxygen
- Date, time, extent (in time) of all excursions above 5 ppmv, corrected to 15% oxygen

The Continuous Emission Monitoring Device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the AQMD Executive Officer. The QAP must address contingencies for monitored ammonia concentrations near, at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once ~~an exceedance~~ a violation has occurred.

The Continuous Emission Monitoring Device may not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

The Continuous Emission Monitoring Device shall be installed and operating no later than 90 days after initial startup of the turbine. (SCAQMD D232-1)

Verification: The project owner shall provide the CPM documentation of the District's approval of the continuous emission monitoring device, within 15 days of its receipt. The project owner shall make the site available for inspection of the monitoring device and monitoring device records by representatives of the District, CARB and the Commission. The project owner shall submit to the CPM emissions data generated by the continuous emission monitoring device as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-27 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the first compliance year hold a minimum NOx RTCs of 159,163 lbs for the initial gas turbine plus 135,754 lbs for the second gas turbine. This condition shall apply during the first twelve months of operation, commencing with the initial operation of each gas turbine.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of 159,069 lbs for each gas turbine. In accordance with Rule 2005(f), unused RTCs may be sold

only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first compliance year. (SCAQMD I296-1 and I296-2)

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-28 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time. (SCAQMD A327-1)

Verification: See verifications for Conditions **AQ-8** and **AQ-9**.

Auxiliary Boiler and SCR

AQ-29 The operator shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-1)

Verification: The project owner shall make the site available for inspection of the ammonia flow meter and ammonia flow records by representatives of the District, CARB and the Commission.

AQ-30 The operator shall install and maintain a temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-2)

Verification: The project owner shall make the site available for inspection of the temperature gauge on the inlet to the SCR and the continuous temperature records by representatives of the District, CARB and the Commission.

AQ-31 The operator shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months. (SCAQMD D12-3)

Verification: The project owner shall make the site available for inspection of the SCR catalyst bed differential pressure gauge and the differential pressure records by representatives of the District, CARB and the Commission.

AQ-32 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NO _x emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SO _x emissions	Approved District Method	District Approved Averaging Time	Fuel Sample
ROG VOC emissions	Approved District Method	1 hour	Outlet of the SCR
PM emissions	Approved District Method	District Approved Averaging Time	Outlet of the SCR
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the auxiliary boiler during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent of maximum load for the NO_x, CO, ~~ROG-VOC, PM~~, and ammonia tests. ~~For all other pollutants, the test shall be conducted at 100% load only.~~ (SCAQMD ~~D29-14~~).

Verification: The project owner shall submit the proposed protocol for the initial source tests 45 days prior to the proposed source test date to the District for approval and to the CPM for review. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.

AQ-33 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH ₃ emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR

The test shall be conducted and the results submitted to the District within 60 days after the test date. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NO_x concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NO_x emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit. (SCAQMD D29-3)

Verification: The project owner shall submit the proposed protocol for the source tests 30 days prior to the proposed source test date to the District for approval and to the CPM for review. The project owner shall notify the District and CPM no later than ten days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-34 The operator shall provide to the District a source test report (see **AQ-32** and **AQ-33**) in accordance with the following specifications:

- Source test results shall be submitted to the District no later than 60 days after the source test was conducted.
- Emission data shall be expressed in terms of concentration (ppmv), corrected to 3 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM cubic feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.
- All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).
- All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.
- Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted. (SCAQMD K40-2)

Verification: See verifications for Conditions **AQ-32** and **AQ-33**.

AQ-35 ~~Reserved~~ **The operator shall limit the fuel usage to no more than 92,844 mmscf per year.**

To comply with this condition, the operator shall install and maintain a non-resettable totalizing fuel meter to accurately indicate the fuel usage of the auxiliary boiler.
(SCAQMD C1.2)

Verification: ~~Reserved.~~ **The project owner shall submit to the CPM and APCO the auxiliary boiler operations data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8). The project owner shall make the auxiliary boiler available for inspection by representatives of the District, CARB and the Commission upon request.**

AQ-36 The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	667- 1,113 LBS IN ANY 1 MONTH
PM ₁₀	233- 218 LBS IN ANY 1 MONTH
ROG VOC	127- 90 LBS IN ANY 1 MONTH
SO _x	19- 21 LBS IN ANY 1 MONTH

The operator shall calculate the emissions by using monthly fuel use data and the following emission factors: CO ~~21.72~~36.92 lb/mmcf, PM₁₀ ~~7.58~~7.26 lbs/mmcf, ~~ROG~~ VOC 4.22~~4.14~~ lbs/mmcf, SO_x ~~0.700~~0.71 lbs/mmcf.

The operator shall calculate the emissions for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan. (SCAQMD A63-2)

Verification: The project owner shall submit to the CPM and APCO boiler emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-37 The operator shall install and maintain a CEMS to measure the following parameters:

- CO concentration in ppmv.

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

The CEMS shall be installed and operated to measure CO concentration over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial startup of the boiler. (SCAQMD D82-3)

Verification: The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-38 The operator shall install and maintain a CEMS to measure the following parameters:

- NO_x concentration is expressed in ppmv.

Concentrations shall be corrected to 3 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 12 months after initial start-up of the boiler and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the boiler startup date, the operator shall provide written notification to the District of the exact date of start-up.

The CEMS shall be in operation and Rule 2012 provisional RATA testing submitted to the AQMD at the conclusion of the turbine commissioning period prior to base load commercial operation.

The CEMS shall be installed and operating no later than 90 days after initial startup of the boiler. (SCAQMD ~~D~~82-4)

Verification: The project owner shall provide the CPM documentation of the Districts approval of the CEMS, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS by representatives of the District, CARB and the Commission.

AQ-39 The ~~8.36~~**8.49** lbs/mmcsf NO_x emission limit(s) shall only apply during the interim reporting period to report RECLAIM emissions. ~~The interim reporting period shall not exceed 12 months from the initial startup date.~~ (SCAQMD ~~A~~99-42)

Verification: The project owner shall submit to the CPM and APCO auxiliary boiler emissions data demonstrating compliance with this condition through the use of the required RECLAIM emission factor, as appropriate, as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-40 For the purpose of the following conditions continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour. (**SCAQMD E179-1**)
Condition **AQ-29** (**SCAQMD D12-1**)
Condition **AQ-30** (SCAQMD ~~179-1~~**D12-2**)

Verification: See verifications for Conditions **AQ-29** and **AQ-30**.

AQ-41 For the purpose of the following condition continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that month. (**SCAQMD E179-2**)

Condition **AQ-31** (SCAQMD ~~179-2~~**D12-3**)

Verification: See verification for Condition **AQ-31**.

AQ-42 The 7 ppmv NO_x emission limit(s) are averaged over one hour at 3 percent oxygen, dry basis. (SCAQMD ~~A~~195-4)

Verification: The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

AQ-43 The 50 ppmv CO emission limit(s) are averaged over 1 hour at 3 percent oxygen, dry basis. (SCAQMD A195-5)

Verification: The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-44 **The 10 ppmv VOC emission limit(s) are averaged over 1 hour at 3 percent oxygen, dry basis. (SCAQMD A195-6)**

Verification: See verification for Condition **AQ-32**.

AQ-45 The 5 ppmv NH₃ emission limit(s) are averaged over 1 hour at 3 percent oxygen, dry basis. (SCAQMD A195-78)

Verification: See verification for Conditions **AQ-32**, **AQ-33**, and **AQ-46**.

AQ-46 The operator shall install, operate, and maintain an approved Continuous Emission Monitoring Device, approved by the Executive Officer, to monitor and record ammonia concentrations, and alert the operator (via audible or visible alarm) whenever ammonia concentrations are near, at, or in excess of the permitted ammonia limit of 5 ppmv, corrected to 3% oxygen. It shall continuously monitor or calculate, and record the following parameters:

- Ammonia concentration, uncorrected in ppmv
- Oxygen concentration in percent
- Ammonia concentration in ppmv, corrected to 3 percent oxygen
- Date, time, extent (in time) of all excursions above 5 ppmv, corrected to 3 percent oxygen

The Continuous Emission Monitoring Device described above shall be operated and maintained according to a Quality Assurance Plan (QAP) approved by the AQMD Executive Officer. The QAP must address contingencies for monitored ammonia concentrations near, at, or above the permitted compliance limit, and remedial actions to reduce ammonia levels once ~~an exceedance~~ a violation has occurred.

The Continuous Emission Monitoring Device may not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia.

The Continuous Emission Monitoring Device shall be installed and operating no later than 90 days after initial startup of the boiler. (SCAQMD D232-2)

Verification: The project owner shall provide the CPM documentation of the District's approval of the continuous emission monitoring device, within 15 days of its receipt. The project owner shall make the site available for inspection of the monitoring device and monitoring device records by representatives of the District, CARB and the Commission. The project owner shall submit to the CPM emissions data generated by the continuous emission monitoring device as part of the Quarterly Operation Report (AQ-SC8).

AQ-47 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the first compliance year hold a minimum NOx RTCs of 786 lbs. This condition shall apply during the first twelve months of operation.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of 786 lbs. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first compliance year. (SCAQMD I296-43)

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

Two Emergency Generator Engines and One Fire Pump Engine

Conditions of Certification AQ-48 through AQ-55 apply separately to ~~the each~~ emergency generator and fire pump engine, unless otherwise specified.

AQ-48 The operator shall limit the operating time of ~~the each~~ engine to no more than ~~200~~ **50** hours per year. (SCAQMD C1-1)

Verification: The project owner shall submit to the CPM and APCO the emergency generator and fire pump IC engines operations data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-49 The operator shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of ~~the each~~ engine. (SCAQMD D12-4)

Verification: The project owner shall make the emergency generator and fire pump engines available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-50 The operator shall install and maintain a non-resettable elapsed fuel meter to accurately indicate the engine fuel consumption. (SCAQMD D12-5)

Verification: The project owner shall make the emergency generator and fire pump engines available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-51 The emergency generator engines shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to

the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the first compliance year hold a minimum NOx RTCs of 1,946 lbs for each engine. This condition shall apply during the first twelve months of operation.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of 1,946 lbs for each engine. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first compliance year. (SCAQMD I296-4)

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-52 The fire pump engine shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall prior to the first compliance year hold a minimum NOx RTCs of 172 lbs. This condition shall apply during the first twelve months of operation.

To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of 172 lbs. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first compliance year. (SCAQMD I296-5)

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8).

AQ-53 The operator shall keep records, in a manner approved by the District, for the following parameters or items:

- Date of operation, the elapsed time, in hours, and the reason for operation.
- Records shall be kept and maintained on file for a minimum of two years and made available to district personnel upon request. (SCAQMD K67-2)

Verification: The project owner shall make the emergency generator and fire pump engine records available for inspection by representatives of the District, CARB and the Commission upon request.

Ammonia Storage Tanks

AQ-54 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled. (SCAQMD ~~144~~**E141**-1)

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-55 The operator shall install and maintain a pressure relief valve set at 25 psig. (SCAQMD **C**157-1)

Verification: The project owner shall make the ammonia tank pressure relief valve and its specifications available for inspection by representatives of the District, CARB and the Commission upon request.

Organic Materials

AQ-56 The operator shall be subject to the applicable requirements of District Rule 1171 for VOC control from Solvent Cleaning Operations. This requirement shall apply to Rule 219 Exempted Cleaning Equipment. (SCAQMD **H**23-1)

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

AQ-57 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.
- For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.
- This requirement shall apply to Rule 219 Exempted Coating Equipment. (SCAQMD **K**67-3)

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission upon request.

BIO-11 Prior to site or related facilities mobilization, the IEEC shall comply with the provisions of Riverside County Ordinance No. 663, which requires the payment of fees for permanent and temporary loss of historical Stephens' kangaroo rat habitat within the Stephens' kangaroo rat HCP fee assessment area. The applicant shall purchase habitat credits for temporary impacts to ~~36.13~~ **47.63** acres and permanent impacts to 38.60 acres. Fees shall be based on the most current fees assessed by Riverside County. Monies will be paid directly to the Riverside County Habitat Conservation Agency.

Verification: At least 30 days prior to site or related facilities mobilization, the project owner shall demonstrate to the CPM evidence of receipt of payment of the Stephens' kangaroo rat habitat fee by the County of Riverside. At least 30 days prior to site mobilization (or other CPM-approved timeframe), the project owner shall submit to the CPM a written certificate or letter from the County of Riverside stating the date and amount of funds received.

HAZ-13 The project owner shall include the following safety measures for the natural gas compressor enclosure:

1. inside natural gas sensors
2. inside fire (flame) detectors
3. ~~automatic gas compressor emergency shut-off valves actuated by the inside gas sensors~~ **remotely operated gas compressor shut-off valves actuated by the plant operator from the control room**
4. outside manual shut-off valves located at least 50 feet from the gas compressor building
5. ~~fire suppression equipment located outside and adjacent to the compressor building~~ **CO2 fire suppression system for the compressor enclosures**
6. unobstructed access to the compressor building by off-site fire department equipment and personnel from two directions
7. a maintenance schedule for the gas compressors

Verification: At least thirty (30) days prior to the introduction of natural gas to the pipeline, the project owner shall provide the CPM with a written description of the safety measures applied to the gas compressor enclosure.

NOISE-4 If a traditional, high-pressure steam or air blow process is employed, the project owner shall equip steam/air blow piping with a temporary silencer that quiets the noise of steam/air blows to no greater than 86 dBA measured at a distance of 100 feet. The noise level at the nearest residence produced by this operation must be less than a constant value of 48 dBA. The project owner shall conduct high pressure steam/air blows only during the hours of 8 a.m. to 5 p.m., unless the CPM agrees to longer hours based on a demonstration by the project owner that offsite noise impacts will not cause annoyance.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected period of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise levels from this process do not exceed

42 dBA hourly Leq at the most-affected residence. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

Verification: At least 15 days prior to the first high-pressure steam/air blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam/air blow silencer and the noise levels expected, and a description of the steam/air blow schedule.

At least 15 days prior to any low-pressure continuous steam/air blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the projected time schedule for execution of the process.

SOIL & WATER 3: Prior to project commercial operation, the project owner shall submit a Notice of Intent for operation under the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity to the State Water Resources Control Board (SWRCB). The project owner shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the operation of the project. The SWPPP shall be submitted to Riverside County for review and comment, and to the CPM for review and approval. The SWPPP shall include final operating drainage design consistent with the criteria specified by the County of Riverside, **including those criteria relating to any adjacent flood control channels,** and specify BMPs and monitoring requirements for the IEEC project facilities. BMPs shall control soil erosion from drainage of storm water below the **vegetated swales or detention pond** and from storm water discharge in the eastern boundary interception ditch. Conditions of Certification **BIO-7** and **BIO-8** address requirements for 401 Water Quality Certification from the Regional Water Quality Control Board and a Section 404 Permit from the Army Corps of Engineers.

Verification: No later than 60 days prior to the start of commercial operation for any project element, the SWPPP for Industrial Activity and a copy of the Notice of Intent for operating under the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity filed with the SWRCB, shall be submitted by the project owner to the County of Riverside Building and Safety Department for comments, and to the CPM for approval. Approval of the SWPPP must be received from the CPM prior to commercial operation.

SOIL & WATER 7: The Ethanac Wash floodplain is located near the southern boundary of the IEEC Site. Construction of the IEEC shall remain outside of the FEMA floodplain shown on the effective Riverside County Flood Insurance Rate Map (FIRM), Panel 2085 of 3600. The project owner shall notify the CPM of any Conditional Letter of Map Revision (CLOMR) requests to modify the Ethanac Wash Floodplain. The project owner shall review the CLOMR request for potential impacts to the IEEC Site. The project owner will provide the CPM evidence that the IEEC property is protected from flooding due to floodplain modifications. The property owner shall submit to the CPM any Letter of Map Revision (LOMR) issued from FEMA resulting in a change to the effective FIRM where FEMA has requested review by the project owner as a potentially affected owner. The project owner shall verify that the IEEC Site is outside of the special flood hazard boundary and elevated above the base flood elevations.

Verification: Prior to initiation of commercial operation of the IEEC, the project owner shall submit to the CPM evidence of its review of documentation requesting changes to the Ethanac Wash Floodplain. The project owner shall copy the CPM on their acknowledgment letter to the CLOMR or LOMR applicant stating that the floodplain modification project will not impact the IEEC site. The project owner shall submit to the CPM evidence of the LOMR from FEMA, and a copy of the revised or annotated FIRM showing the IEEC Site. The Annual Compliance Report shall report any floodplain changes that have a potential to impact the IEEC Site during operations.

VIS-3 The project owner shall provide landscaping that is effective in screening the proposed project from views from I-215, State Route (SR)-74, Ethanac Road, Dawson Road, Almaden Lane, Spring Winds Drive, North Winds Drive, McLaughlin Road, Menifee Road, and nearby residences. Trees and other vegetation consisting of informal groupings of fast-growing evergreen species must be strategically placed and of sufficient density and height to effectively screen the majority of structural forms as soon as is reasonably practicable. The landscaping shall conform to Applicant's Revised Landscaping Plan submitted by the project owner on December 20, 2002 (Ex. 65) except for the changes indicated by italics in the following list: (1) street trees shall be planted immediately west of the project site along Antelope Road, (2) two offset rows of taller *evergreen* screening trees shall be planted on the berm to be constructed on the west side of the project site bordering Antelope Road, one row on top of the berm and one row on the west slope of the berm; (3) evergreen shrubs shall also be planted on the western berm to provide screening beneath the tree branches; (4) landscape plantings along the ~~western~~ southern half of the ~~southern~~ western boundary shall be initiated within one year of the start of construction; (5) If the Riverside County Economic Development Agency agrees to permit the project owner to incorporate planting along the southern side of SR 74 into its plans for beautification of the SR 74 corridor, the plantings in this area shall be installed at the start of construction or as soon after the start of construction as the EDA permits; and (6) informal groupings of fast-growing broadleaf evergreen trees shall be placed along all sides of the compressor station site.

The project owner shall submit a landscaping plan to the CPM for review and approval. The plan shall include:

- a) 11"x17" color simulations of the proposed landscaping at five years as viewed from KOPs 2, and 5;
- b) a plan view to scale depicting the project and the location of the landscape screening;
- c) a detailed list of plants to be used, their size, the expected time to maturity, and the expected height at five years and at maturity; and a table showing when the screening objectives are calculated to be achieved for each of the major project structures, and the height and elevation of the features of the existing setting and the project that are factors in those calculations;
- d) A description of any irrigation needed to ensure the proper growth and health of the plantings.

The planting must be completed by start of commercial operation.

Verification: ~~Prior to site mobilization and a~~ At least 45 days prior to installing the landscaping, the project owner shall submit the landscaping plan to the CPM for review and approval, and to Riverside County for review and comment. If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within 30 days of receiving that notification the project owner shall prepare and submit to the CPM a revised submittal.

The project owner shall notify the CPM, within seven days after completing installation of the landscaping, that the landscaping is ready for inspection.

VIS-8 The project owner shall ensure that the IEEC cooling tower is designed and operated so that the plume frequency will not increase substantially from the design as certified.

~~Prior to ordering the cooling tower, t~~ The project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation. The project owner shall not order the cooling tower until notified by the CPM that the following design requirements have been satisfied:

Either:

- a) The cooling tower design confirms that the exhaust air flow rate per heat rejection rate:

4) will not be less than ~~29.8~~ **28.4** kilograms per second per megawatt when ~~operating without duct firing when~~ ambient temperatures are between 32 degrees Fahrenheit and 100 degrees Fahrenheit; ~~and or~~

2) ~~will not be less than 18.42 kilograms per second per megawatt when operating with duct firing when ambient temperatures are between 32 degrees Fahrenheit and 100 degrees Fahrenheit; or~~

b) If the cooling tower design exhaust air flow rates per heat rejection values are reduced from the levels shown in 1 or 2 above, the cooling tower design confirms that the plume frequency will not exceed staff's criteria for triggering a visual impact analysis (i.e., greater than 10% **20 percent** of the seasonal daylight clear hours), ~~where "clear" is defined as all hours with total sky cover equal to or less than 10 percent plus half of the hours with total sky cover 20-100 percent that have a sky opacity equal to or less than 50 percent.~~

Verification: If the project owner intends to comply under requirement (a) above, at least 30 days prior to ordering the cooling tower the project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation.

If the project owner intends to comply under requirement (b) above, at least 60 days prior to ordering the cooling tower the project owner shall provide to the CPM for review and approval the final design specifications of the cooling tower related to plume formation, including revised exhaust flow, exhaust temperature, and heat rejection data to allow staff to remodel the cooling tower plume frequency. **The determination of percent of seasonal daylight clear hours will be based on a definition of "clear" as all hours with total sky cover equal to or less than 10 percent plus half of the hours with total sky cover 20-100 percent that have a sky opacity equal to or less than 50 percent.**

The project owner shall provide a written certification in each Annual Compliance Report to demonstrate that the cooling towers have consistently been operated within the design parameters, except as necessary to prevent damage to the cooling tower. If determined by the CPM to be necessary to ensure operational compliance, based on legitimate complaints received or physical evidence of potential non-compliant operation, the project owner shall monitor the cooling tower operating parameters in a manner and for a period as specified by the CPM. For each period that the cooling tower operation monitoring is required, the project owner shall provide to the CPM the cooling tower operating data within 30 days of the end of the monitoring period. The project owner shall include with this operating data an analysis of compliance and shall provide proposed remedial actions if compliance cannot be demonstrated.

WORKER SAFETY-3 The Project Owner shall ensure that a CPM-approved Safety Monitor(s) conducts an on-site safety inspection of the power plant at least once a week during construction of permanent structures and commissioning unless a lesser number of

inspections is approved by the CPM. The CPM may also require a similar inspection and report concerning linear facilities.

The Safety Monitor shall keep the Chief Building Official (CBO) fully informed regarding safety-related matters and coordinate with the CBO concerning on-site safety inspections, and the final safety inspection prior to issuance of the Certificate of Occupancy by the CBO. The Safety Monitor will be retained until cessation of construction and commissioning activities, and issuance of the Certificate of Occupancy, unless otherwise approved by the CPM.

The Safety Monitor(s) shall also:

- **Correct any construction or commissioning problems that could pose a future danger to life or health, consulting with the CBO as necessary.**
- **Have the authority to temporarily stop construction or commissioning activities involving possible safety violations or unsafe conditions that may pose an immediate or future danger to life or health, until the problem is resolved to the satisfaction of the Safety Monitor and/or CBO.**
- **Consult with the CBO to determine when construction may resume unless the problem is corrected immediately, and to the satisfaction of the Safety Monitor and/or CBO.**
- **Inform the CPM within 24 hours of any temporary halt in construction or commissioning activities.**
- **Be available to inspect the site whenever necessary in addition to the minimum weekly basis during construction and commissioning as determined in consultation with the CBO and CPM.**
- **Develop a safety program for the Project that complies with Cal/OSHA & federal regulations related to power plant projects.**
- **Ensure that all federal and Cal/OSHA requirements are practiced during the construction and installation of all permanent structures (including safety aspects of electrical installations).**
- **Ensure that all construction and commissioning workers and supervisors receive adequate safety training.**
- **Conduct safety training (including fall protection, confined spaces, respiratory protection, hazard communication, etc.), or ensure that the Project owner, union hall, and/or contractors conduct adequate safety training.**
- **Maintain all Material Safety Data Sheets, storage of all hazardous materials and all other required documentation for Cal/OSHA.**

- Complete all accident and incident investigations, emergency response reports for injuries and inform the CPM of OSHA Recordable and Lost Time incidents.
- Ensure that all the plans identified in WORKER SAFETY-1 are implemented.

The Safety Monitor shall be qualified regarding the following:

- Safety issues related to equipment, pipelines, etc,
- LORS applicable to workplace safety and worker protection
- Workplace hazards typically associated with power production
- Lock out tag out and confined spaces control systems
- Site security practices and issues

Verification: The Project owner shall submit the Safety Monitor(s) resume(s) to the CPM for approval at least 30 days prior to site mobilization. One or more individuals may hold this position.

The Safety Monitor shall submit in the Monthly Compliance Report a monthly safety inspection report to include:

- Records of all employees trained for that month (all records shall be kept on site for the duration of the Project);
- A summary report of safety management actions that occurred during the month;
- A report of any continuing or unresolved situations and incidents that may pose danger to life or health;
- Reports of OSHA Recordable and Lost Time incidents and injuries that occurred during the month.

IT IS SO ORDERED.

Date: June 22, 2005

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

JOSEPH DESMOND, Chair