

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

In the Matter of:)	
MOUNTAINVIEW POWER PROJECT)	Docket No. 00-AFC-2C
MOUNTAINVIEW POWER)	
COMPANY, L.L.C.)	Order No. 04-0908-05
)	ORDER APPROVING a Petition
)	to modify air quality conditions of
)	certification

Mountainview Power Company, L.L.C., the owner/operators of the Mountainview Power Project, has requested to modify the emergency fire pump model, the size of the black-start emergency engine, tuning emissions and duration, and turbine start up mode. The modifications will allow the Mountainview Power Company more flexibility in commissioning, tuning and start-up emissions and duration periods. The modifications will also clarify “Cold Startup” and “Combustor Tuning”.

The modifications were approved by the South Coast Quality Management District and a revised Authority to Construct was issued on July 21, 2004.

The Energy Commission approves Mountainview Power Company, L.L.C.’s proposed amendment and the proposed modified Conditions of Certification in accordance with Title 20, Section 1769(a) of the California Code of Regulations.

ENERGY 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 Energy 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;
- The Change will be beneficial to the project owner because it will allow more flexibility during commissioning, tuning and startup periods, as well as allowing for minor equipment changes.

- There has been a substantial change in knowledge of equipment performance since the Energy Commission certification justifying the modifications requested. This new information was not available to the parties prior to the Energy Commission certification in 2001.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts the following changes to the Mountainview Power Project's Decision. New language is shown as **bold** and underlined. Deleted language is shown in strikeout.

The Following Conditions apply to the following equipment

1,991 MMBTU/HR Gas Turbine (ID No. D18) (A/N ~~366147~~ 391557) No. 3-1 GE Model 7FA with Dry Low NOx combustors connected directly to a 175.7 MW (nominal at ISO conditions) Electric Generator (ID No. B19) and a Heat Recovery Steam Generator (ID No. B20) with 135 MMBTU/HR Duct Burners (ID No. D21) connected in common with Gas Turbine No. 3-2 to a 214.5 MW (nominal at ISO conditions) steam turbine (ID No. B22). Selective Catalytic Reduction (ID No. C24) (A/N 366151) with 2750 cubic feet of total volume 72 feet height, 1.5 feet long, 25.6 feet wide with an ammonia injection grid (ID No. B25) and a CO oxidation catalyst (ID No. C23) with 240 cubic feet of total volume connected to an exhaust stack (ID No. S3526) (A/N ~~366146~~ 391557) No 3-1/~~3~~-2.

1,991 MMBTU/HR Gas Turbine (ID No. D27) (A/N ~~366148~~ 391558) No. 3-2 GE Model 7FA with Dry Low NOx combustors connected directly to a 175.7 MW (nominal at ISO conditions) Electric Generator (ID No. B28) and a Heat Recovery Steam Generator (ID No. B29) with 135 MMBTU/HR Duct Burners (ID No. D30) connected in common with Gas Turbine No. 3-1 to a 214.5 MW (nominal at ISO conditions) steam turbine (ID No. B31). Selective Catalytic Reduction (ID No. C33) (A/N 366152) with 2750 cubic feet of total volume 72 feet height, 1.5 feet long, 25.6 feet wide with an ammonia injection grid (ID No. B34) and a CO oxidation catalyst (ID No. C32) with 240 cubic feet of total volume connected to an exhaust stack (ID No. S35) (A/N ~~366146~~ 391559) No ~~3~~-1/~~3~~-2.

1,991 MMBTU/HR Gas Turbine (ID No. D36) (A/N ~~366149~~ 391559) No. 4-3 GE Model 7FA with Dry Low NOx combustors connected directly to a 175.7 MW (nominal at ISO conditions) Electric Generator (ID No. B37) and a Heat Recovery Steam Generator (ID No. B38) with 135 MMBTU/HR Duct Burners (ID No. D39) connected in common with Gas Turbine No. 4-4 to a 214.5 MW (nominal at ISO conditions) steam turbine (ID No. B40). Selective Catalytic Reduction (ID No. C42) (A/N 366153) with 2750 cubic feet of total volume 72 feet height, 1.5 feet long, 25.6 feet wide with an ammonia injection grid (ID No. B43) and a CO oxidation catalyst (ID No. C41) with 240 cubic feet of total volume connected to an exhaust stack (ID No. S53 44) (A/N ~~366149~~ 391559) No 4-3/~~4~~-4.

1,991 MMBTU/HR Gas Turbine (ID No. D45) (A/N ~~366150~~ 391560) No. 4-4 GE Model 7FA with Dry Low NOx combustors connected directly to a 175.7 MW (nominal at ISO conditions) Electric Generator (ID No. B46) and a Heat Recovery Steam Generator (ID No. B47) with 135 MMBTU/HR Duct (ID No. D48) connected in common with Gas Turbine No. 4-3 to a 214.5

MW (nominal at ISO conditions) steam turbine (ID No. B49). Selective Catalytic Reduction (ID No. C51) (A/N 366154) with 2750 cubic feet of total volume 72 feet height, 1.5 feet long, 25.6 feet wide with an ammonia injection grid (ID No. B52) and a CO oxidation catalyst (ID No. C50) with 240 cubic feet of total volume connected to an exhaust stack (ID No. S53) (A/N 366150 391560) No 4-3/4-4.

AQ-1 During the final phase of construction, the operator shall be allowed to exceed normal operational and startup emission limits and operational constraints (AQ-9, AQ-10, AQ-11, AQ-12, AQ-13 and AQ-14) and will be subject only to the limit prescribed in this Condition so that the turbine systems and controls can be fine tuned. This phase of construction is referred to herein as initial commissioning, ~~and shall be limited to no more than 33 operating days for each gas turbine following the date natural gas is first fired in that gas turbine.~~ The commissioning period shall not exceed 1,272 combined operating hours per two gas turbine power block from the time of initial startup. The power block is defined as two gas turbines that are connected to the same steam turbine. The project owner shall provide the District and Energy Commission with written notification of the initial startup date within two weeks of the startup.

~~If the turbine is loaded below 60%, the NOx emission factor used for RECLAIM purposes shall be 356 lbs/mmcf. If the turbine is loaded at or above 60%, the NOx emission factor used for RECLAIM purposes shall be 64 lbs/mmcf. No more than two turbine systems shall be in initial commissioning at one time. The project owner shall provide written notification to the District and California Energy Commission of the exact date natural gas is first fired in each of the four turbines, and the date, for each gas turbine, that commissioning activities are completed.~~

During the commissioning period and the interim reporting periods prior to the CEMS becoming validated by the District, the project owner shall report NOx emissions by using the recorded fuel use data and the assumed emission factor of 32.32 lbs/mmscf. Such record shall be made, kept and maintained on file for a minimum of five years and shall be made available to the District and the Energy Commission upon request. The facility log shall indicate the date, number of operating hours and fuel consumed for each turbine and duct burner during the commissioning period.

Verification: ~~The project owner and/or operator (project owner) shall report the turbine loading conditions (as a percent of maximum), duration of loading conditions (hours), the date of operation, the number of hours of operation, the natural gas fuel consumption during loading conditions (mmcf) and total NOx emissions during loading conditions (lbs) from initial commissioning to the California Energy Commission Compliance Project Manager (CPM) for each of the four gas turbines and duct burners no later than 10 days following the termination of the initial commissioning period for the last gas turbine in the monthly compliance report.~~

AQ-2 ~~During the first 12 months of operation immediately following first fire, the project owner shall either (1) limit the annual natural gas fuel consumption for all four gas turbines and all four duct burners to no more than 35,000 MMCF or (2) demonstrate to the satisfaction of the South Coast Air Quality Management District (District) and the CPM that the total NOx emissions from all four gas turbines and duct burners will not exceed 250,302 pounds.~~

Verification: The project owner shall submit total NO_x emissions and natural gas fuel consumption reports to the CPM for the four gas turbines and duct burners as part of the Quarterly Operational Reports as described in Condition AQ-8. Requests to increase this emission limit shall be submitted to the District and CPM, and shall be accompanied by documentation evidencing that the Project Owner has sufficient RTCs to support the request.

AQ-2 The owner/operator shall determine the hourly ammonia slip emissions from each exhaust stack for each gas turbine/HRSG train individually via both the following formulae:

District Requirement

$$\text{NH}_3 \text{ (ppmv)} = [a-b*(c*1.2)/1E6]*1E6/b$$

Where:

$$a = \text{NH}_3 \text{ injection rate (lb/hr) / 17(lb/lbmol),}$$

$$b = \text{dry exhaust flow rate (scf/hr) / 385.5 (scf/lbmol),}$$

$$c = \text{change in measured NO}_x \text{ across the SCR (ppmvd at 15\% O}_2\text{)}$$

The above described ammonia slip calculation procedure shall not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia for the District.

Energy Commission Requirement

$$\text{NH}_3 \text{ (ppmv @ 15\% O}_2\text{)} = ((a-b*(c/1E6))*1E6/b)*d,$$

Where:

$$a = \text{NH}_3 \text{ injection rate(lb/hr)/17(lb/lbmol),}$$

$$b = \text{dry exhaust gas flow rate (lb/hr)/(29(lb/lbmol), or}$$

$$b = \text{dry exhaust flow rate (scf/hr) / 385.5 (scf/lbmol),}$$

$$c = \text{change in measured NO}_x \text{ concentration ppmv corrected to 15\% O}_2 \text{ across catalyst, and}$$

$$d = \text{correction factor.}$$

The correction factor shall be derived through compliance testing by comparing the measured and calculated ammonia slip. The correction factor shall be reviewed and approved by the CPM on at least an annual basis. The correction factor may rely on previous compliance source test results or other comparable analysis as the CPM finds the situation warrants. The above described ammonia slip calculation procedure shall be used for Energy Commission compliance determination for the ammonia slip limit as prescribed in Condition of Certification AQ-11 and reported to the CPM on a quarterly basis as prescribed in Condition of Certification AQ-8.

An exceedance of the ammonia slip limit as demonstrated by the above Energy Commission formula shall not in and of itself constitute a violation of the limit. An exceedance of the ammonia slip limit shall not exceed 6 hours in duration. In the event of an exceedance of the ammonia slip limit exceeding 6 hours duration, the project owner shall notify the CPM within 72 hours of the occurrence. This notification must include, but is not limited to: the date and time of the exceedance, duration of the exceedance, estimated emissions as a result of the exceedance, the suspected cause of the exceedance and the corrective action taken or planned. Exceedances of the ammonia limit that are

less than or equal to 6 hours in duration shall be noted in a specific section within the Quarterly Report (AQ-8). This section shall include, but is not limited to: the date and time of the exceedance, duration of the exceedance, and the estimated emissions as a result of the exceedance. Exceedances shall be deemed chronic if they total more than 500 hour per year (approximately 10% of the expected operation) for any single HRSG exhaust stack. Chronic exceedances must be investigated and redressed in a timely manner and in conjunction with the CPM through the cooperative development of a compliance plan. The compliance plan shall be developed to bring the project back into compliance first and foremost and shall secondly endeavor to do so in a feasible and timely manner, but shall not be limited in scope.

The owner/operator shall maintain compliance with the ammonia slip limit, redress exceedances of the ammonia slip limit in a timely manner, and avoid chronic exceedances of the ammonia slip limit. Exceedances shall be deemed a violation of the ammonia slip limit if they are not properly redressed as prescribed herein.

The owner/operator shall install a NOx analyzer to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least once every 12 months.

Verification: The project owner shall include ammonia slip concentrations averaged on an hourly basis calculated via both protocols provided as part of the Quarterly Operational Report required in Condition of Certification AQ-8. The project owner shall submit all calibration results performed to the CPM within 60 days of the calibration date. The project owner shall submit to the CPM for approval a proposed correction factor to be used in the Energy Commission formula at least once a year but not to exceed 180 days following the completion of the annual ammonia compliance source test. Exceedances of the ammonia limit shall be reported as prescribed herein. Chronic exceedances of the ammonia slip limit shall be identified by the project owner and confirmed by the CPM within 60 days of the fourth quarter Quarterly Operational Report (AQ-8) being submitted to the CPM. If a chronic exceedance is identified and confirmed, the project owner shall work in conjunction with the CPM to develop a reasonable compliance plan to investigate and redress the chronic exceedance of the ammonia slip limit within 60 days of the above confirmation.

AQ-4 The owner shall install and maintain a temperature gauge to accurately measure and record the temperature in the SCR catalyst. The system shall be accurate to within +/- 5 percent and shall be calibrated once every 12 months.

The operator shall install and maintain a pressure gauge to accurately indicate and continuously record the pressure drop across the SCR catalyst bed in inches of water column. The system shall be accurate to within +/- 5 percent and shall be calibrated once every 12 months.

Such records shall be and maintained on site per District requirements.

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Commission. The project owner shall submit to the CPM a written statement by a California Certified Professional Engineer that the required SCR temperature gauge has been installed no later than 6 week after installation. The project owner

shall submit to the CPM a written statement by a California Certified Professional Engineer that the required SCR pressure gauge has been installed no later than 6 week after installation. The project owner shall, on an annual basis, submit to the CPM a written statement by a California Certified Professional Engineer that the required SCR temperature gauge has been calibrated as required no later than 6 week after calibration. The project owner shall, on an annual basis, submit to the CPM a written statement by a California Certified Professional Engineer that the required SCR pressure gauge has been calibrated as required no later than 6 week after calibration.

AQ-5 The project owner shall install, maintain and operate no later than 90 days after the initial startup of the turbine a continuous emissions monitoring system (CEMS) for each gas turbine exhaust stack to measure CO concentration in ppmv corrected to 15% oxygen on a dry basis and convert those CO concentrations to mass emission rates in units of pounds per hour (lbs/hr). The CEMS shall be capable of measuring at least over a 15-minute averaging period and shall record hourly mass emission rates on a continuous basis. The CEMS shall be installed and operated in accordance with an approved District Rule 218 CEMS plan application. The CEMS plan shall include a requirement for on going relative accuracy testing. The project owner shall NOT install the CEMS prior to receiving initial approval from the District.

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Energy Commission. The owner shall submit to the CPM a copy of the CEMS plan application submitted to the District and the initial written approval for installation from the District. No later than two weeks after the initial startup date of each turbine, the project owner shall provide written notification to the District and CPM of the exact date of startup.

AQ-6 The project owner shall install, maintain and operate a continuous emissions monitoring system (CEMS) for each gas turbine exhaust stack to continuously measure the concentrations of NOx (in ppmv) and oxygen in percent, fuel flow rate, and operational status codes as defined in District Rule 2012 once every 15 minutes. In compliance with District Rule 2012, the project owner shall at least annually test the NOx CEMS for relative accuracy. The NOx CEMS shall record the combined NOx emissions from all four gas turbines and their respective duct burners whenever at least one gas turbine is in startup mode. The CEMS will convert all recorded ~~the~~ NOx concentrations to mass emissions and record NOx mass emissions hourly and daily. The CEMS shall be installed and operating no later than 12 months following first fire (District Rule 2021(h)(6)). From the time of first fire until the CEMS are certified, the project owner shall comply with the fuel monitoring requirements of District Rule 2012(h)(2) and 2012(h)(3).

Verification: The project owner shall make the site and appropriate records available for inspection by representatives of the District, CARB, EPA and the Energy Commission.

AQ-9 The project owner shall vent the gas turbine and duct burners to the SCR **and oxidation catalyst** control whenever the turbines or duct burners are in operation, including startup and normal operation. ~~The gas turbines shall not begin startup (defined as including the purge cycle) until the SCR has been preheated to a temperature of at least 500oF.~~

Verification: The project owner shall submit SCR temperature recordings (see AQ-4) for each startup for each gas turbine in the Quarterly Operational Reports (see AQ-8). The project owner shall submit to the CPM a written statement by a California Certified Professional Engineer that the gas turbine and HRSG exhausts connections to the SCR and oxidation catalysts are operational and air tight installed no later than 6 week after installation.

AQ-10 Startup is defined for a gas turbine/HRSG train as beginning when fuel is introduced into the turbine’s combustor, and ending immediately prior to the first 15-minute period when both the NOx and CO limits in Conditions AQ-11 are met. Cold-Startup is defined as a startup, as previously defined, which directly follows at least 72 hours of non-operation of the turbine. Shutdown is defined for a gas turbine/HRSG train as beginning at the start of the first 15-minute period when the NOx and CO limits in Condition AQ-11 are not met, and ending with the flow of fuel to the turbine’s combustor ceases. Combustor-Tuning is defined as all manufacturer recommended activities required to ensure safe and reliable steady state operation of the gas turbine following the replacement of one (or more) of the turbine combustors. The project owner shall notify the District (via e-mail at REFINERYENERGY@AQMD.GOV) and the CPM (by written letter) within two weeks of combustor tuning activities. ~~No more than two gas turbines shall be in startup mode at one time.~~ The total duration of startups and shutdowns shall not exceed ~~4~~ 3-hours per gas turbine/HRSG per day. ~~While any gas turbine is in startup mode, the NOx emissions from all four turbines combined shall be limited to 75.54 lbs/hr.~~ The duration of Cold-Startups may not exceed 6 hours per gas turbine/HRSG per day. The duration of Combustor-Tuning may not exceed 6 hours per gas turbine/HRSG per day. The NOx emissions from any gas turbine in startup mode shall be limited to 80.0 lbs/hr. While any gas turbine is in startup mode, the NOx and CO emission limits in Condition AQ-11 shall not apply for that turbine. During a Startup, Shutdown, Cold Startup or Combustor Tuning event the following emission limits shall apply as indicated:

<u>NOx Emission Limit</u>	<u>Averaging Time</u>	<u>Operational Requirements</u>
<u>80 lbs/hour</u>	<u>1 hour</u>	<u>Applies only to a single turbine/HRSG train during Combustor-Tuning event.</u>
<u>160 lbs/hour</u>	<u>3 hours, rolling</u>	<u>Applies only to a single turbine/HRSG train only during a Startup or Cold-Startup event.</u>
<u>320 lbs/hour</u>	<u>1 hour</u>	<u>Applies to the combined emissions of all four turbine/HRSG trains whenever 1 or more turbines are in Startup or Cold-Startup mode.</u>

Verification: The project owner shall submit fuel use, NOx emissions and operational status on an hourly basis during each startup, ~~or~~ shutdown, Cold-Startup or Combustor-Tuning event for each gas turbine in the Quarterly Operational Reports (see AQ-8).

AQ-11 Except during startup, shutdown, Cold-Startup, Combustor-Tuning, and initial commissioning and the exceptions noted below, emission from each gas turbine exhaust stack shall not exceed the following limits:

NOx (measured as NO2):	2.5 <u>2.0</u> ppm at 15% oxygen on a dry basis averaged over one hour and 17.77 <u>14.22</u> lbs/hour.
CO:	<u>6.0</u> ppm at 15% oxygen on a dry basis averaged over 3 <u>1</u> hours and 25.91 lbs/hr.
SOx (measured as SO2):	1.42 lbs/hr
VOC:	3.47 lbs/hr
PM10:	11.0 lbs/hr
Ammonia:	5 ppm at 15% oxygen on a dry basis

Exceptions:

The NOx limit shall not apply to the first fifteen 1-hour average NOx emissions that are 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, B, C and D:

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 an evaporative cooler

c) The first two 1-hour reporting periods following the initiation of HRSG duct burners.

d) Events as the result of technological limitation identified by the operator and approved in writing by the AQMD Executive Officer or his designees and the CPM.

B. The 1-hour average NOx 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 must be 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 data and time of entry into the log/CEMS and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmv 1-hour average limit.

D. The 1-hour average NOx concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O2

All NOx emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit.

Verification: The project owner shall submit emission calculations to demonstrate compliance for the NOx and CO limits ~~in the Quarterly Operational Reports (see AQ-8)~~ and source tests, as required in Condition AQ-15, AQ-16 and AQ-17, to demonstrate compliance with SOx, VOC and PM10 emission limits in the Quarterly Operational Reports (see AQ-8). Within 5 working days of the occurrence of an exception as described within this Condition, the owner/operator shall notify the CPM. Within 21 working days, of the occurrence of an exception as described within this Condition, the owner/operator shall submit to the CPM a complete report of the exception event. That report must include, but is not limited to: the date, time, duration and cause of the occurrence, the emissions (in total mass and hourly concentration normalized to 15% O₂) because of the occurrence and the evidence required in element (B) above.

AQ-12 Except for initial commissioning, but including startup, ~~and~~ shutdowns, Cold-Startups and Combustor-Tunings the emissions from each gas turbine exhaust stack shall not exceed the following limits:

CO	8,610 lbs per month
CO	<u>694 lbs per day</u>
VOC	2,498 lbs per month
PM10	7,725 lbs per month
SOx	1,005 lbs per month

Protocol: The project owner shall confirm compliance with the monthly limits by using the monthly fuel use data of each gas turbine and duct burner pair and the following emission factors:

VOC	1.64 <u>1.76</u> lbs/mmscf
PM10	5.21 <u>5.57</u> lbs/mmscf
SOx (measured as SO ₂):	0.67 <u>0.71</u> lbs/mmscf

Compliance with the CO monthly limit shall be confirmed through the valid (per District Rule 218) CO CEMS or, absent valid CO CEMS, by the monthly fuel use data and the following emission factors:

<u>During Commissioning</u>	<u>114.47</u>	<u>lbs/mmscf</u>
<u>Following Commissioning</u>	<u>13.10</u>	<u>lbs/mmscf</u>

Verification: The project owner shall submit the monthly fuel use data and emission calculations to the CPM in the Quarterly Operation Reports (AQ-8).

AQ-13 ~~Except for initial commissioning, the emissions shall not exceed the following limits: NOx (measured as NO₂): 2 ppm at 15% oxygen from each gas turbine exhaust stack averaged over a year excluding periods of startup and shutdown as defined in Conditions~~

AQ-10 and 235.9 tons per year total for all four turbines/HRSGs, including periods of startup and shutdown as defined in Conditions AQ-10.

Verification: ~~The project owner shall submit all necessary data and emission calculations electronically to the CPM in the fourth Quarter Operation Report only (AQ-8) to verify compliance of the annual emission limits. The project owner shall submit to the CPM a copy of the annual RTC reconciliation report filed with the District within 10 days of the report's filing with the District.~~

AQ-15 The project owner shall conduct an initial source test and annually thereafter for NOx, CO and NH3 and once every three years thereafter for SOx, VOC and PM10 of each gas turbine exhaust stack in accordance with the following requirements:

- The project owner shall submit a source test protocol to the District and the ~~Commission~~ CPM 45 days prior to the proposed ~~initial~~ source test date for approval. The protocol shall include the proposed operating conditions of the gas turbine, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of District Rule 304, and a description of all sampling and analytical procedures.
- ~~The source test shall be conducted within 60 days of the approval of the source test protocol by the District, but no later than 180 days following the date of first fire.~~
- The initial source test shall be conducted no later than 180 days following the date of first fire.
- The District and ~~Commission~~ CPM shall be notified at least ~~40~~ 7 days prior to the date and time of ~~the~~ a source test.
- The ~~initial~~ source test shall be conducted with the gas turbine operating under loads of 50%, 75% and 100% of maximum.
- The ~~initial~~ source test shall be conducted to determine the oxygen levels in the exhaust.
- The ~~initial~~ source test shall measure the fuel flow rate, the flue gas flow rate and the as turbine generating output.
- The ~~initial~~ source test shall be conducted for the pollutants listed using the methods, ~~and~~ averaging times, and test locations indicated and as approved by the CPM:

Pollutant	Method	Averaging Time	Test Location
NOx	District Method 100.1	1 hour	<u>Outlet of SCR</u>
CO	District Method 100.1	1 hour <u>District Approved</u>	<u>Outlet of SCR</u>
SOx	District Method 100.1 <u>District approved method</u>	1 hour <u>District Approved</u>	<u>Fuel Sample</u>
VOC	District approved method	1 hour	<u>Outlet of SCR</u>
PM10	District approved method	1 hour <u>District Approved</u>	<u>Outlet of SCR</u>
Ammonia	District approved method <u>District Methods 5.3 and</u>	1 hour	<u>Outlet of SCR</u>

	<u>207.1 or EPA Method 17.</u>		
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- The ~~initial~~ source test results shall be submitted to the District and the ~~Commission~~ CPM no later than 60 days after the source test was conducted.
- All emission data is to be expressed in the following units:
 1. ppmv corrected to 15% oxygen,
 2. pounds per hour,
 3. pounds per million cubic feet of fuel burned and
 4. additionally, for PM10 only, grains per dry standard cubic feet of fuel burned.

Verification: The project owner shall submit the proposed protocol for the ~~initial~~ source tests 45 days prior to the proposed source test date to both the District and CPM for approval. 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 ~~40~~ 7 days prior to ~~a the proposed initial source test date and time.~~

AQ-16 The project owner shall conduct source testing of each gas turbine exhaust stack in accordance with the following requirements:

- The project owner shall submit a source test protocol to the District and the ~~Commission~~ CPM no later than ~~60~~ 45 days prior to the proposed source test date for approval. The protocol shall include the proposed operating conditions of the gas turbine, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of District Rule 304, and a description of all sampling and analytical procedures.
- Source testing shall be conducted quarterly for the first 12 months of operation and annually thereafter.
- NOx concentrations as determined by CEMS shall be simultaneously recorded during the ammonia test. If the NOx CEMS is inoperable, a test shall be conducted to determine the NOx emission by using District Method 100.1 measured over a 60 minute averaging period.
- Source testing shall be conducted to determine the ammonia emissions from each gas turbine exhaust stack using ~~an approved~~ District Method 5.3 and 207.1 or EPA Method 17 measured over a 1 hour averaging period.
- The District and ~~Commission~~ CPM shall be notified of the date and time of the source testing at least 7 days prior to the test.
- The source test shall be conducted and the results submitted to the District and ~~Commission~~ CPM within 45 days after the test date.
- Source testing shall measure the fuel flow rate, the flue gas flow rate and the gas turbine generating output.
- The test shall be conducted when the equipment is operating at 80 percent load or greater.
- All emission data is to be expressed in the following units:

1. ppmv corrected to 15% oxygen,
2. pounds per hour,
3. pounds per million cubic feet of fuel burned and

Verification: The project owner shall submit the proposed protocol for the source tests ~~60~~ 45 days prior to the proposed source test date to both the District and CPM for approval. No later than 7 days prior to the proposed source test, ~~The project owner shall notify the District and CPM no later than 7 days prior to the proposed~~ of the source test date and time of the source test. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

The following Conditions of Certification pertain to the following equipment:

~~Internal combustion engine, emergency power, diesel Caterpillar 3512B, electronically controlled, turbocharged, aftercooled, 2200 BHP A/N 366155 (ID. No. D54).~~

Internal combustion engine, emergency power, diesel Caterpillar 3612, 4⁰ timing retard, turbocharged, aftercooled, 5900 BHP A/N 366155 (ID. No. D54).

AQ-18 The project owner shall not use fuel oil containing sulfur compounds in excess of ~~0.05-~~ percent 15 ppm by weight as supplied by the supplier.

Verification: The project owner shall maintain records on site for a minimum of five years and make them available for inspection by request from representatives of the District, CARB, EPA or the Energy Commission (see AQ-21).

AQ-19 Deleted The project owner shall set and maintain the fuel injection timing of the emergency IC engine at 4⁰ retarded relative to standard timing.

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

AQ-23 The project owner shall limit the operating time of the emergency IC engine to no more than ~~200~~ **199** hours per year.

Verification: The project owner shall submit the recorded data specified in condition AQ-21 on an annual basis as part of the fourth Quarter Operational Report (see AQ-8).

The following Conditions of Certification pertain to the following equipment:

~~Internal combustion engine, emergency fire pump, diesel Cummins 6BTA Clarke Model JW6H-UF60, 4 9.7⁰ timing retard, turbocharged, aftercooled, 182 375 BHP A/N 366156 (ID. No. D55-58).~~

AQ-24 The project owner shall not use fuel oil containing sulfur compounds in excess of ~~0.05-~~ percent 15 ppm by weight as supplied by the supplier.

Verification: The project owner shall maintain records on site for a minimum of five years and make them available for inspection by request from representatives of the District, CARB, EPA or the Energy Commission (see AQ-27).

AQ-25 The project owner shall set and maintain the fuel injection timing of the fire pump IC engine at 4 9.7⁰ retarded relative to standard timing.

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

AQ-28 The project owner shall limit the operating time of the fire pump IC engine to no more than ~~200~~ 199 hours per year.

Verification: The project owner shall submit the recorded data specified in condition AQ-27 on an annual basis as part of the fourth Quarter Operational Report (see AQ-8).

AQ-36 The gas turbines shall not be operated unless the operator demonstrates to the District and CPM that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, the gas turbines shall not be operated unless the operator demonstrates to the District 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 emission increase.

The owner/operator shall limit the first year, defined as the first 12 months following initial operation, cumulative facility wide NOx emissions from all equipment to no more than 492,897 lbs/year.

The owner/operator shall, prior to the beginning of all years subsequent to the first year (as defined above), hold a minimum of 464,338 lbs of NOx RTCs for the operation of all equipment at the facility.

In accordance with District 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.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District in each Quarterly Operational Report. (see AQ-8).

The following Conditions of Certification pertain to the following equipment:

~~Storage tank, TK-1, serving SCRs 3-1 and 3-2 with a vapor return line, aqueous ammonia 24.5% solution, 22,500 gallons A/N 366162 (ID No. D56).~~

~~Storage tank, TK-2, serving SCRs 4-3 and 4-4 with a vapor return line, aqueous ammonia 24.5% solution, 22,500 gallons A/N 366163 (ID No. D57).~~

~~Storage tank, TK-3, aqueous ammonia, 24.5% wt., serving SCRs 3-1, 3-2, 4-3, 4-4, with a vapor return line, ~~22,500~~ 36,000 gallons (ID No. D60)~~

AQ-38 The project owner shall install and maintain a pressure relief valve with a minimum pressure set at 25 psig in the aqueous ammonia storage tank.

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

IT IS SO ORDERED.

Date:

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

WILLIAM J. KEESE, Chairman