DOCKETED

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Project Title:	Otay Mesa Compliance
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Document Title:	Otay Mesa Energy Center Amendment #11
Description:	Petition for Modification
Filer:	Jessica Leung
Organization:	Otay Mesa Energy Center / Calpine Corporation
Submitter Role:	Applicant
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May 28, 2014

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

RE: AMENDMENT #11
DOCKET NO. 99-AFC-5C

Dear Mr. Rundquist:

Pursuant to Section 1769 of the California Energy Commission (CEC) Siting Regulations, Otay Mesa Energy Center, LLC ("Otay Mesa") hereby submits the attached Petition for Modification to Docket No. 99-AFC-5C ("Petition" or "Amendment #11").

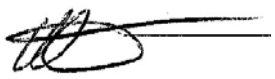
This Petition requests modification of the air quality conditions of certification in the CEC license. These changes are necessary to conform the CEC license conditions to the conditions of Otay Mesa's current Title V Permit and Permit to Operate. In addition, it removes any air quality conditions pertaining to the auxiliary boiler, because the auxiliary boiler is no longer operating.

Attached hereto and in support of this requested modification are the following documents:

Attachment 1- Amendment No. 11
Attachment 2- Otay Mesa revised air quality conditions
Attachment 3- Redline of the current and proposed air quality conditions
Attachment 4- Comparison Table of the current and proposed air quality conditions including justification for each proposed change
Attachment 5- Otay Mesa Permit to Operate

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

Sincerely,



Barbara McBride
Director, Environmental Services

ATTACHMENT 1

Otay Mesa Energy Center

99-AFC-5C

Amendment No. 11

Submitted by
Otay Mesa Energy Center

May 2014

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1.0 Introduction

1.1 Overview of Amendment

Otay Mesa Energy Center, LLC ("Otay Mesa") operates the Otay Mesa Energy Center ("Project"), a facility located in San Diego County in the Otay Mesa area. The facility consists of a 510 MW (nominal) combined-cycle natural gas-fired power plant.

The Commission granted the original license for the Project on April 23, 2001 (hereinafter, "Decision"). The Decision has been previously amended 10 times**.**

Otay Mesa seeks to amend the air quality conditions of certification to reflect the conditions currently in Project's Title V Permit and Permit to Operate, so that all permits are consistent. This amendment would also remove all conditions relating to the auxiliary boiler on site, because that boiler is no longer in operation.

The proposed revisions to the conditions in the CEC license are set forth in Attachment A to this Petition. Amending these conditions will not result in any significant adverse effect on the environment. These changes will allow the Project to continue to comply with all applicable laws, ordinances, regulations or standards.

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

TABLE 1
Informational Requirements for Post-Certification Amendments and Changes

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

TABLE 1
Informational Requirements for Post-Certification Amendments and Changes

Section 1769 Requirement	Section of Petition Fulfilling Requirement
(H) A list of property owners potentially affected by the modification	Section 5.1
(I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.	Section 5.2

1.2 Summary of Environmental Impacts

Section 1769 (a)(1)(E) of the Commission's Siting Regulations requires that an analysis be conducted that addresses the impacts a modification might have on the environment and proposed measures to mitigate any significant adverse impacts. In addition, Section 1769 (a)(1)(F) requires a discussion of the impacts that a modification might have on the Project's ability to comply with applicable laws, ordinances, regulations and standards (LORS). Section 3.0 of this Amendment addresses potential environmental impacts and consistency of this Amendment with LORS.

2.0 Description of Project Changes

California Energy Commission Siting Regulations Sections 1769 (a)(1)(A) and 1769(a)(1)(B) require a complete description of the physical changes being proposed to the Project, as well as the necessity for this Amendment. In this case, no physical changes are being proposed to the Project. The necessity for the changes in the conditions of certification is described below.

2.1 Amending the Air Quality Conditions

This Amendment seeks to confirm the CEC license to the Project's current conditions in the Title V Permit and Permit to Operate so that all permits are consistent. These amendments are administrative or minor in nature. This Amendment also seeks to remove all conditions relating to the auxiliary boiler on site, because that boiler is no longer in operation. The modifications proposed to the air quality conditions of certification are set forth in Attachment A.

2.2 Whether The Proposed Changes Are Based on Information Known at the Time of Certification

Pursuant to Section 1769(a)(1)(C), a discussion is required if the modification is based on information that was known by the petitioner during the certification proceeding, and an explanation of why the issue was not raised at that time.

The change in air quality conditions were not known at the time of certification because there were different conditions in the Project's Title V Permit and Permit to Operate at the time. Since commercial operations began, there have been changes made to the Project's other air permits, thus requiring this change in the CEC license.

2.2 Necessity of Proposed Changes

Currently, the Project's air quality conditions do not match the numbering in the conditions in the Title V Permit and Permit to Operate. Amending the air quality conditions would make all the conditions consistent and assist the Project in ensuring compliance.

3.0 Environmental Analysis of the Project Changes

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

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

3.1 Amending the Air Quality Conditions of Certification

3.1.1 Air Quality

The amendments to the air quality conditions of certification are of administrative nature, to make the permit consistent with its other operating permits. Attachment B illustrates each air quality condition and whether it was moved or deleted. It also gives the justification for the amendment.

3.1.2 Biological Resources

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the biological resources conditions of certification.

3.1.3 Cultural Resources

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the cultural resources conditions of certification.

3.1.4 Geology and Paleontology

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the geology and paleontology conditions of certification.

3.1.5 Hazardous Materials Management

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the hazardous materials management conditions of certification.

3.1.6 Land Use

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the land use conditions of certification.

3.1.7 Noise and Vibration

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the noise and vibration conditions of certification.

3.1.8 Public Health

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the public health conditions of certification.

3.1.9 Socioeconomics

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the socioeconomics conditions of certification.

3.1.10 Soil and Water Resources

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the soil and water resources conditions of certification.

3.1.11 Traffic and Transportation

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the traffic and transportation conditions of certification.

3.1.12 Visual Resources

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the visual resources conditions of certification.

3.1.13 Waste Management

The amendments to the conditions of certification only pertain to air quality and thus will have no impact on the waste management conditions of certification.

3.1.14 Worker Safety and Fire Protection

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

3.2 Consistency of Amendment with the Certification and LORS

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

The amendments to the air quality conditions of certification are consistent with the intent of the Decision and do not undermine the assumptions, rationale, findings or other bases of the final decision.

Similarly, this Amendment is consistent with all applicable LORS.

4.0 Potential Effects on the Public

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

Amending the air quality conditions of certification does not adversely affect the public because the facility will still adhere to the conditions in the Projects's Title V Permit, Permit to Operate, as well as all other conditions of certification contained in the CEC license.

5.0 List of Property Owners

5.1 List of Property Owners

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

5.2 Potential Effects on Property Owners

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

As described in this Amendment, there will be no significant adverse environmental impacts from the air quality amendments, in fact there will no impacts at all. Accordingly, the Amendment will have no effect on nearby property owners, the public and parties to the original application proceeding.

ATTACHMENT 2

Attachment 2

CONDITIONS OF CERTIFICATION

ENERGY COMMISSION STAFF CONDITIONS

These conditions are not included in the District's Determination of Compliance.

For the purposes of these conditions, the following definitions apply:

(1) ACTIVE OPERATIONS shall mean any activity capable of generating fugitive dust, including, but not limited to, earth moving activities, construction/ demolition activities, or heavy- and light-duty vehicular movement.

(2) CHEMICAL STABILIZERS mean any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

(3) CONSTRUCTION/DEMOLITION ACTIVITIES are any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking

(4) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified 'from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust.

(5) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(6) EARTH-MOVING ACTIVITIES shall include, but not be limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, or soil mulching.

(7) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result 'of the activities of man.

(8) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of ten consecutive days.

(9) STABILIZED SURFACE means:

(A) any disturbed surface area or open storage pile which is resistant to wind-driven fugitive dust;

(B) any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.

(10) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

AQ-SC1. The project owner shall implement a CEC CPM approved fugitive Dust Control Plan.

Protocol: The plan shall include the following:

1. A description of each of the active operation(s) which may result in the generation of fugitive dust;
2. An identification of all sources of fugitive dust (e.g., earth-moving, storage piles, vehicular traffic, etc.
3. A description of the control measures to be applied to each of the sources of dust emissions identified above (including those required in AQ-SC2 and -SC3 below). The description must be sufficiently detailed to demonstrate that the applicable best available control measure(s) as specified in Table 1 (attached) will be utilized and/or installed during all periods of active operations;
4. In the event that there are special technical (e.g., non-economic) circumstances, including safety, which prevent the use of at least one of the required control measures for any of the sources identified, a justification statement must be provided to explain the reason(s) why the required control measures cannot be implemented.

Verification: Not later than sixty (60) days prior to the commencement of construction, the project owner shall submit the plan to the CEC CPM for review and approval. The project owner shall maintain daily records to document the specific actions taken pursuant to the plan and Table 1. A summary of the monthly activities shall be submitted to the CPM via the Monthly Compliance Report.

AQ-SC2. During the construction phase of the project, the project owner shall:

1. Prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations, or take at least one of the actions listed in Table 2 (attached) to prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations;
2. Install and use a track-out control device to prevent the track-out of bulk material from areas containing soils requiring corrective to other areas within the project construction site and laydown area;
3. Minimize fugitive particulate emissions from vehicular traffic on paved roads and paved parking lots on the construction site by vacuum mechanical sweeping or water flushing of the road surface to remove buildup of loose material. The project owner shall inspect on a daily basis the conditions of the paved roads and parking lots to determine the need for mechanical sweeping or water flushing.

Verification: The project owner shall maintain a daily log during the construction phase of the project indicating: 1) the manner in which compliance with this condition or Table 2 is achieved, and 2) the date and time when the inspection of paved roads and parking lots occurs and the date and time(s) when the cleaning operation occurs. The logs shall be made available to the California Energy Commission CPM upon request.

AQ-SC3. At any time when fugitive dust from OMGP project construction is visible in the atmosphere beyond the property line, the project owner will identify the source of the fugitive dust and implement one or more of the appropriate control measures specified in Table 3 (attached)

Verification: The project owner will maintain a daily log recording the dates and times that measures in Table 3 (attached) have been implemented and make them available to the CPM upon request.

AQ-SC4. The project owner shall implement an approved Construction Equipment Plan. The Plan shall identify how the project owner will ensure that all heavy equipment, that includes, but is not limited to, bulldozers, backhoes, compactors, loaders, motor graders and trenchers, and cranes, dump trucks and other heavy duty construction related trucks, used on-site by construction contractors and subcontractors:

a. are properly maintained;
b. use low sulfur diesel fuel, 50 ppm sulfur or less;
c. limit idling times; and
d. meet federal emission standards for construction equipment.

Verification: Not later than sixty (60) days prior to the commencement of construction, the project owner .shall submit the plan to the California Energy Commission CPM for review and approval. The project owner shall maintain records to document the specific actions taken pursuant to the plan. A summary of the monthly activities shall be submitted to the CPM via the Monthly Compliance Report.

AQ-SC5. The project owner shall ensure that all heavy earthmoving equipment including, but not limited to, bulldozers, backhoes, compactors, loaders, motor graders and trenchers, and cranes, dump trucks and other heavy duty construction related trucks, have been properly maintained and the engines tuned to the engine manufacturer's specifications. The project owner shall also install oxidizing soot filters on all suitable construction equipment used either on the power plant construction site or associated linear construction sites. Where the oxidizing soot filter is determined to be unsuitable, the owner shall install and use an oxidizing catalyst. Additionally, the project· owner shall employ high pressure fuel injection; timing retardation, and reduced idle time on all suitable construction equipment. Suitability is to be Determined by an independent California Licensed Mechanical Engineer or a Qualified Environmental Professional who will stamp and submit for approval an initial and all subsequent Suitability Reports as necessary containing at a minimum the following:

Initial Suitability Report:

- The initial suitability report shall be submitted to the CPM for approval 60 days prior to the relevant equipment being used at the project site.

- A list of all fuel burning, construction related equipment used,
- a determination of the suitability of each piece of equipment to work appropriately with an oxidizing soot filter, or an oxidizing catalyst,
- if a piece of equipment is determined to be suitable, a statement by the equipment or catalyst manufacturers, the independent California Licensed Mechanical Engineer, or a Qualified Environmental Professional that the oxidizing soot filter has been installed and is functioning properly,
- if a piece of equipment is determined to be unsuitable, an explanation by the equipment or catalyst manufacturers, the independent California Licensed Mechanical Engineer, or a Qualified Environmental Professional as to the cause of this determination, and
- a statement by the equipment or catalyst manufacturers, the California. Licensed Mechanical Engineer, or a Qualified Environmental Professional as to the suitability of using high-pressure fuel injectors, timing retardation and/or reduced idle time on all construction equipment after the installation of either oxidizing soot filters or oxidizing catalysts.

Subsequent Suitability Reports

- If a piece of construction equipment is subsequently determined to be unsuitable for an oxidizing soot filter after such installation has occurred, the filter may be removed immediately. However notification must be sent to the CPM for approval containing an explanation for the change in suitability within 10 days.
- Changes in suitability are restricted to three explanations, which must be identified in any subsequent suitability report. Changes.in suitability may not be based on the use of high-pressure fuel injectors, timing retardation and/or reduced idle time.

1. The oxidizing soot niter is reducing normal availability of the construction equipment due to increased downtime, and/or power output due to increased back pressure by 20% or more.
2. The oxidizing soot filter is causing or reasonably expected to cause significant damage to the construction equipment engine.
3. The oxidizing soot filter is causing or reasonably expected to cause a significant risk to nearby workers or the public.

Changes in suitability may not be based on the use of high-pressure fuel injectors, timing retardation and/or reduced idle time.

Verification: The project owner shall submit to the CPM, via the Monthly Compliance Report, documentation, which demonstrates that the contractor's heavy earthmoving equipment is properly maintained and the engines are tuned to the manufacturer's specifications. The project owner shall maintain all records on the site for six months following the start of commercial operation. The project owner will submit to the CPM for approval, the initial suitability report stamped by an independent California Licensed Mechanical Engineer or a Qualified Environmental Professional, 60 days prior to breaking ground on the project site. The project owner will submit to the CPM for approval, subsequent suitability reports as required, stamped by an independent

California Licensed Mechanical Engineer or a Qualified Environmental Professional, no later than 10 working day following a change in the suitability status of any construction equipment.

AQ-SC6. The owner/operator shall provide a mitigation fee, for potential PM10 and PM10 precursor impacts, to the District APCO to provide PM10 and PM10 precursor reductions throughout the District. The amount of the fee shall equal $1.2 million escalated at a rate equal to the Consumer Price Index from October 31, 2003 until the payment is made. The payment shall be made no later than 14 months prior to "first fire" of either turbine, or October 31, 2006, whichever is first. The fees shall be provided to the District, who with guidance from CARB or the CEC, will allocate the funds to programs such as the Lower-Emission School Bus Retrofit Program, the Carl Moyer program, or some other program designed to reduce PM10 and PM10 precursor emission in the District.

The District shall preferentially make available the mitigation fee funds to the Sweetwater Union High, the San Ysidro Elementary, the South Bay Element ry. or the Chula Vista Elementary Districts for school bus retrofits. The preference shall be in the form of a first right of refusal given to the above districts for no more than 2 years from the date of the first fee payment by the project owner. Any mitigation fee funds not used by the above school districts or available after 2 years from the date of the first fee payment by the project owner shall be made available for other program-appropriate emission reductions through the District's program.

Verification: No later than 20 days after delivery of the mitigation payment to the District, the project owner/operator shall provide to the CEC CPM a letter (or copy thereof) 'from the District APCO indicating receipt of the payment.

AQ-SC7. The owner/operator shall assign to the project all PM10, VOC and SOX emission reductions that occur intentionally or incidentally during the formation of the NOx MERC for the project. The PM10, VOC and SOx emission reductions are part of the PM10 and PM10 precursor mitigation for the project.

Verification: The owner/operator shall provide a letter assigning to the project, and for the life of the project, all PM10, VOC and SOX emission reductions that occur intentionally or incidentally during the formation of the project's NOx MERCs. The letter shall be provided to the CEC CPM with the surrender of the ERC and MERC certificates identified in Condition AQ-57.

AQ-SC8. The emissions of particulate matter less than 10 microns (PM10) from the Wet Surface Air Cooler shall not exceed 0.1 lbs/hr, based on design

specifications limiting circulating water flow rates to no more than 5 million gallons per hour and warranties limiting drift to no more than 0.0006%.

Verification: The project owner shall provide copies of Wet Surface Air Cooler specifications and a vendor warranty of the drift efficiency to the CEC CPM 60 days prior to WSAC equipment delivery on site.

AQ-SC9. Compliance with the WSAC PM10 emission limit shall be determined by circulating water sample analysis by independent laboratory within 60 days of initial operation and quarterly thereafter.

Verification: The results and field data collected from cooling tower blowdown water samples analysis shall be submitted to the CPM and the District as part of the quarterly reports required in Condition AQ-38.

AQ-SC10. The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or EPA, and any revised permit issued by the District or EPA, for the project.

Verification: The project owner shall submit any proposed air permit modification to the CPM within 'five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

DISTRICT OTAY MESA GENERATING FDOC CONDITIONS

General Conditions

AQ-1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-2. This equipment shall be properly maintained and kept in good operating condition at all times.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-3. The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-4. The project owner shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-5. The emissions of any single federal hazardous air pollutant (HAP) shall not equal or exceed 10 tons, and the aggregate of all federal HAPs, shall not equal or exceed 25 tons in any rolling 12 calendar month period. Compliance with the HAP limits shall be based on a surrogate VOC/HAP correlation factor determined during initial source testing If emissions exceed these limits, the project owner shall apply to amend this permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR 63.

Verification: The emissions of any single federal hazardous air pollutant, and the aggregate of all federal hazardous air pollutants, shall not equal or exceed 10 tons or 25 tons, respectively, in any continuous 12 calendar month period. If emissions exceed these limits, the permittee shall apply to amend these limits and conduct a case-by case Maximum Achievable Control Technology (MACT) analysis in accordance with applicable federal EPA regulations.

AQ-6. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-7. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-8. The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act.

Verification: The project owner shall make the records available for inspection by

representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-9. The total aggregate annual emissions from all emission units at the stationary source shall not exceed 100 tons of oxides of nitrogen (NOx), calculated as nitrogen dioxide, and shall not exceed 316 tons of carbon monoxide (CO) for each consecutive 12-calendar month period. The NOx and CO emissions shall begin accruing at the initial firing of each turbine. Compliance with this limit shall be verified using the CEMS system on each gas turbine as well as EPA- or ARB-certified NOx emissions factors, testing results, or other representative emissions information for all other combustion equipment.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. T he information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-10. The total aggregate emissions of volatile organic compounds (VOC) from all emission units at the stationary source shall not exceed 47.5 tons for each consecutive 12-calendar month period. The VOC emissions shall begin accruing at the initial firing of each piece of equipment. Compliance shall be verified using testing results, EPA- or ARB-certified VOC emissions factors, and/or other representative emissions information for all other combustion equipment.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-11. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 1-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified through annual source testing. This limit shall not apply to the first fifteen 1-hour average NOx emissions measurements above 2.0 ppmvd corrected to 15% oxygen in any rolling 12-month period for each gas turbine provided the following requirements are met:

a. this equipment operates under any one of the following:

i) Rapid combustion turbine load changes due to the following conditions:

A) Load changes initiated by the California Independent Systems Operator (ISO) or a successor entity when the plant is operating under Automatic Generation Control; or
B) Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load
ii) The first two 1-hour reporting periods following the initiation or shutdown of a system injection pump
iii) The first two 1-hour reporting periods following the initiation of HRSG duct burners
iv) Events as the result of technological limitation identified by the operator and approved in writing by the District.
b. the 1-hour average NOx emissions above 2.0 ppmvd corrected to 15% oxygen did not occur as a result of operator neglect, improper operation or maintenance, and is a qualified breakdown under District Rule 98.
c. the qualified operating conditions described in (a) above are recorded in the plant's operating log within 24 hours of the event. The notations in the log shall describe the data and time of entry into the log and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmvd 1-hour average limit.
d. the 1-hour average NOx concentration for periods that result from a qualified operating condition described in (a) above does not exceed 25 ppmvd corrected to 15% oxygen.
All NOx emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by the Permit to Operate.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-12. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 110 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. This limit shall apply at all times, including periods of startup and shutdown. Compliance with this limit shall be based on CEMS data for each unit as averaged in accordance with 40 CFR 60 Subpart GG Subsection 60.334.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-13. Excess emissions, as defined in 40 CFR 60 Subpart GG Subsection 60.334, shall be reported pursuant for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be postmarked by the 30th day following the end of each calendar 6-month period unless more frequent reporting is required in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be submitted to the District's Compliance Division.

Verification: These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-14. The emissions of carbon monoxide (CO) from each turbine shall not exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with these limits shall be based on CEMS data for each unit and averaged over each continuous 3-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified annual source testing.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-15. The emissions of volatile organic compounds (VOC) from each turbine, calculated as methane, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CO CEMS data for each unit, averaged over each 1-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation, and the District approved CO/VOC surrogate relationship. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on annual source testing.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-16. When operated with the duct burner at or below 38.8 MMBtu/hr heat input, the emissions from each turbine shall not exceed the following emissions limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, an/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a continuous 3-hour averaging period and compliance with the VOC limit shall be based on a 1-hour averaging period.

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	13.14
Carbon Monoxide, CO	24.0
Volatile Organic Compounds, VOC	4.58

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating with power augmentation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB). and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-17. When operated with the duct burner above 38.8 MMBtu/hr heat input, the emissions from this equipment shall not exceed the following emission limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a continuous 3-hour averaging period and compliance with the VOC limit shall be based on a 1-hour averaging period.

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	15.95
Carbon Monoxide, CO	29.13
Volatile Organic Compounds, VOC	5.56

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating with power augmentation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB). and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-18. The emissions of particulate matter less than 10 microns (PM10) from each turbine shall not exceed 9.0 lbs/hr when operated with the duct burner at or below 38.8 MMBtu/hr heat input and shall not exceed 11.5 lbs/hr from each turbine when operated with the duct burner above 38.8 MMBtu/hr. Compliance with this limit shall be based on annual source testing (only with the duct burner operating in accordance with AQ-21).

Verification: The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests.

AQ-19. Except during startups and shutdowns, the emissions of ammonia (slippage) from each gas turbine exhaust stack shall not exceed 10.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a 1-hour period. Compliance with this limit shall be based on a District approved calculation methodology and verified during annual source testing.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources

Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-20. Fuel consumption by the duct burners for both turbines shall not exceed 3,881,000 MMBtu (HHV) per rolling 12-month period. Whenever the duct burners are in operation, the CEMS shall record the dates and fuel consumption for each duct burner. The CEMS shall also record the total duct burner fuel usage for each rolling 12-month period (in MMBtu). The applicant shall maintain a log that contains, at a minimum, the dates and fuel usage when one or both turbines are operated with duct firing. These records shall be maintained on site for a minimum of five years and made available to District personnel upon request.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating with power augmentation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-21. When operated under startup conditions, the emissions from each turbine shall not exceed the following emission limits, averaged over each 1-hour period, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors and/or District approved emission source testing:

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	240.0
Carbon Monoxide, CO	2706
Volatile Organic Compounds, VOC	48.0

AQ-22. When operated under startup or shutdown conditions, the emissions from each turbine shall not exceed the following emission limits, totaled per event, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors and/or District approved emission source testing:

Pollutant (during startups)	Emission Limit, lbs/ event
Oxides of Nitrogen, NOx (calculated as NO2)	480
Carbon Monoxide, CO	5412
Volatile Organic Compounds, VOC	96

Pollutant (during shutdowns)	Emission Limit, lbs/ event
Oxides of Nitrogen, NOx (calculated as NO2)	80
Carbon Monoxide, CO	902
Volatile Organic Compounds, VOC	16

Verification: The project owner shall maintain records of the duration startups and shutdowns of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-23. Startup for each gas turbine shall be defined as the period beginning with the introduction of fuel to the combustion turbine following a non-operational period and ending after the lesser of either 360 minutes of continuous of fuel flow or when the CEMS records ten consecutive one-minute data points in compliance with the emission concentration limits of Conditions 11, 14, and 19 for the gas turbine. Excluding extended startups and the first 120 minutes of all other startups, the gas turbines shall comply with a NOx emission concentration limit of

11.8 ppmvd corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period. For the purposes of this Permit to Operate, an extended startup shall be defined as the time during any startup when the steam turbine inner casing temperature is less than or equal to 500 °F.

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-24. During startups, including extended startups as defined in Condition 23, excluding the first 120 minutes of the startup, NOx emissions from the gas turbine shall not exceed 42 ppm corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period.

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-25. Shutdown for each gas turbine shall be defined as the 60-minute period preceding the termination of fuel flow to the gas turbine.

Verification: The project owner shall maintain records of the duration of all shutdowns of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-26. Both gas turbines shall not be operated simultaneously in startup mode.

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-27. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein.

Verification: All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request.

AQ-28. For each emission limit expressed as pounds per hour or parts per million based on a 1-hour averaging period, compliance shall be based on each 1-clock hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data. A valid clock hour shall be defined as one that includes at least 16 minutes of valid 1-minute data or includes a data point from at least two different quadrants that are spaced at least 15 minutes apart. A duct burner clock hour shall be

defined as a valid clock hour in which the duct burner heat input exceeds 38.8 MMBtu/hr.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-29. For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on rolling 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-30. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of: -Sections 75.10 and 75.12 of Title 40 -Code of Federal Regulations Part 75 (40 CFR 75) -the performance specifications of Appendix A of 40 CFR 75 -the quality assurance procedures of Appendix B of 40 CFR 75 -the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60.

Verification: The project owner shall maintain records of all CEMS certification and maintenance. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-31. When the CEMS is not recording data and the unit is operating, hourly NOx emissions shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMS during the most recent hours in which the unit operated 3 continuous hours at no less than 80% of full power rating of each power station, either with or without duct firing.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site

for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-32. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence.

Verification: The project owner shall maintain records of any emissions exceedance of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-33. The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMs Protocol approved by the District.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-34. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-35. Operating logs or Data Acquisition System (DAS) records shall be maintained to record the following:

a. dates of all startups and shutdowns;
b. beginning and end times, to the nearest minute, of all startups and shutdowns;
c. fuel usage, in standard cubic feet, for each clock hour, calendar month, and 12-calendar month period;
d. hours of daily operation; and
e. total cumulative hours per calendar year.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-36. Continuous monitors shall be installed on each turbine to monitor or calculate and record the following:

a. Gas turbine natural gas flow rate (scfh),
b. Duct burner natural gas flow rate (scfh),
c. Gas turbine heat input rate (MMBtu/hr), HHV,
d. Duct burner heat input rate (MMBtu/hr), HHV,
e. Ammonia stack concentration (ppmvd, corrected to 15% oxygen),
f. Ammonia injection rate (lbs/hr),
g. Steam turbine inner casing temperature (ºF),
h. SCR inlet temperature (ºF),
i. Exhaust gas temperature (ºF), and
j. Power output (gross MW).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. The monitors shall be in full operation at all times when the turbine is in operation.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-37. The applicant shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO and VOC, in tons per year, from all emission units, at this stationary source for the previous 12-calendar month period. These records shall be made available for inspection within 30 calendar days after the end of each calendar month.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-38. All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. In addition, quarterly reports of information recorded by these conditions, as specified, shall be sent to the CPM.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, optimization, replacement and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.

AQ-39. This equipment shall be source tested once each permit year (annual source test) to demonstrate compliance with the emission standards specified in AQ-34, 10, and 37. For the purposes of this permit, a permit year is the 12-month period ending on the last day of the permit expiration month. It is the responsibility of the permittee to schedule the source test with the District. The source test shall be performed or witnessed by the District. Each annual source test shall be separated by at least 90 days from any annual source test performed in a different permit year. If this testing will be performed by someone other than the District, a source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the following requirements:

a. Measurements of oxides of nitrogen (NOx), carbon monoxide (CO), and stack gas oxygen content (O2) shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) Methods 7E, 10 and 3A, respectively, and the San Diego Air Pollution Control District Method 100, or alternative methods approved by the District and the EPA.
b. Measurements of particulate matter less than 10 microns shall be conducted in accordance with the U.S. Environmental Protection Agency (EPA) Methods 201A and 202, or alternative methods approved by the District and the EPA.
c. Measurements of volatile organic compounds (VOC) shall be conducted in accordance with San Diego Air Pollution.
Control District Methods 18 and/or 25A, or alternative methods approved by the District and the EPA.
d. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management
District (BAAQMD) Method ST-1B, or alternative methods approved by the District and the EPA.
e. Source testing shall be performed only with both the combustion turbine and duct burner in operation. The duct burner shall be operated at not less than 80% of the rated heat input unless it is demonstrated to the satisfaction of the District that the unit cannot operate under these conditions. If the demonstration is accepted, then the emissions source testing shall be performed at the highest achievable continuous heat input.
f. Source testing shall be performed at not less than 80% of the unit's rated load unless

it is demonstrated to the satisfaction of the District that the unit cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous power level.
g. The following additional operating characteristics shall also be measured or calculated and recorded:
gas turbine natural gas flow rate (scfh),
duct burner natural gas flow rate (scfh),
fuel higher heating value (Btu/scf),
gas turbine heat input rate (MMBtu/hr),
duct burner heat input rate (MMBtu/hr),
ammonia injection rate (lbs/hr),
SCR inlet temperature (°F),
Exhaust gas temperature (°F),
Power output (gross MW).

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-40. A Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-41. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-42. Beginning with the start of the ongoing emission reduction monitoring period as defined in "Alternative Mobile Source Emission Reduction Program for Replacing Heavy and Medium Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels Under Rule 27 (c)(1)(vi)" as approved on September 8, 2000 (herein referred to as the Alternative MERC Program), the owner or operator shall, on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year:

a. for each ongoing emission reduction monitoring year, based on the quarterly activity levels submitted by the mobile source owners and the applicable calculation method specified in the Alternative MERC Program, perform a calculation of the annual average and annual aggregate ongoing emission reductions and the ongoing emission reduction deficit, if any, for the MERCs surrendered to offset the facility's emissions;

b. provide an annual report to the District that summarizes the annual average ongoing emission reductions for each MERC, aggregate ongoing emission reductions, and the ongoing emission reduction deficit, if any, and provides supporting calculations and documentation; and

c. if the calculated annual ongoing emission reduction deficit is positive, notify the District, provide a compliance schedule to correct the ongoing emission reduction deficit, and correct the ongoing emission reduction deficit in accordance with Subsection (h)(4) of the Alternative MERC Program.

Verification: The project owner shall submit an annual MERC report to the District and the CPM on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year.

AQ-43. Beginning with the second calendar year following the calendar year that the facility commences operations, the owner or operator shall, on or before March 1 of each calendar year:

a. based on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment is less than 0.8;

b. based on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment in primary service is less than 0.8; and

c. if one or more MERCs fractional employment or fractional employment in primary service is less than 0.8, provide a compliance schedule to correct any MERC shortfall and correct any MERC shortfall in accordance with Subsection (j)(4) of the Alternative MERC Program.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-44. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3-hour period, excluding hours when the equipment is operated under any startup condition. If the project NOx emissions limit is reduced to 1.0 ppm, the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12-month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-45. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3-hour period, excluding hours when the equipment is operated under any startup condition. If the project NOx emissions limit is reduced to 1.0 ppm, the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12-month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-46. For the purposes of this Determination of Compliance and Authority to Construct, the period described as "on-going" operation of the turbines shall commence immediately following the end of the Commissioning Period. Condition Nos. AQ-9, 10, 23, and 37

shall continue to apply during on-going operations.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-47. The permittee shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment.

Verification: The project owner shall provide copies of the design details of the ancillary equipment to be installed, including emergency engines to the CPM and the District at least 90 days prior to the delivery of the equipment to the project site.

AQ-48. This equipment shall be fired on natural gas only. The sulfur content of the natural gas used shall not exceed 0.75 grains per 100 standard cubic feet of natural gas. The applicant shall maintain quarterly records of fuel sulfur content (grains of sulfur compounds per 100 set of natural gas) and higher heating value (Btu/set) and shall make these records available to District personnel upon request. Specifications, including sulfur content and higher heating value, of all natural gas, other than Public Utility Commission (PUC)-regulated natural gas, shall be submitted to the District for written approval prior to use.

Verification: These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-49. The applicant shall maintain a log of all startups and shutdowns for each turbine. The log shall contain, at a minimum, the dates and times of each startup or shutdown, and the duration of each startup or shutdown. This log shall be maintained on site for a minimum of five years and made available to District personnel upon request.

Verification: The project owner shall maintain records of all startups and shutdown of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-50. The applicant shall comply with the continuous emission monitoring requirements of 40 CFR Part 75.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-51. For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on each continuous 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous monitoring data.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, startup/shutdown, and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.

AQ-52. The exhaust stacks for each turbine power station shall be at least 160 feet (48.8 meters) in height.

Verification: The project owner shall provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post- combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.

AQ-53. The exhaust stacks for each turbine power station shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Appendix Figure 2.

Verification: The project owner shall provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post-combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.

AQ-54. Prior to initial firing, each turbine shall be equipped with continuous monitors to measure or calculate and record the following operational characteristics of each unit:

natural gas flow rate (scfh), heat input rate (MMBtu/hr),
exhaust gas flow rate (dscfm), exhaust gas temperature (°F), and power output (gross MW).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. This protocol, which shall include calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial firing of the gas turbines. The monitors shall be in full operation at all times when the turbine is in operation.

Verification: The project owner shall provide copies of the operating protocol, including the calculation methodology for the CEMS system or a CEMS development status to the District, for written approval, and the CPM at least 60 days prior to initial firing of the gas turbines.

AQ-55. All CEMS shall be certified, calibrated, maintained, and operated for the monitoring of NOx and CO in accordance with applicable regulations including the requirements of Sections 60.7(c), 60.7(d), and 60.13 of Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Performance Standards of Appendix B of 40 CFR 60, Quality Assurance Procedures of Appendix F of 40 CFR 60 and 40 CFR 75, and a protocol approved in writing by the District.

Verification: These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-56 To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution Control District Hearing Board, when operating without any post- combustion air pollution control equipment, the emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine shall not exceed 19.8 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 15% oxygen, excluding startups and shutdowns as defined in District Rule 69.3.1.

Verification: The project owner shall maintain records of the NOx emission concentrations of each gas turbine when operating with post-combustion air pollution control equipment. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-57. Within 30 days after completion of the Commissioning Period, an initial emissions source test shall be conducted by an independent, ARB approved tester at the applicant's expense to determine the emissions of toxic air contaminants and federal hazardous air pollutants (HAPs). A source test· protocol shall be submitted to the District for written approval at least 60 daysprior to source testing. The source test shall demonstrate compliance with the following limits (for each turbine):

Pollutant	Emission Limit, lbs/hr
Acetaldehyde	0.09
Acrolein	0.01
Benzene	0.03
Ethyl Benzene	0.07
Formaldehyde	0.29
Naphthalene	3.66E-3
Polyaromatic Hydrocarbons (PAHs,) (excluding naphthalene)	3.4 E-4
Toluene	0.29
Xylene	0.14

Verification: This project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

TABLE 1
BEST AVAILABLE FUGITIVE DUST CONTROL MEASURES

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the CEC CPM. Two soil moisture evaluations must be operations) conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the CEC CPM. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM, Method 1557 or other equivalent method approved by the CEC CPM, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving: Construction cut areas and mining operations:	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	Apply chemical stabilizers within five working days of grading completion; OR
	Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slop or other safety conditions; OR
	Apply dust suppressants in sufficient quantity any frequency to maintain a stabilized surface; OR
	Establish a vegetative ground cover within 21 days after

	active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.
Unpaved Roads	Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR
	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hours; OR
	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	Apply chemical stabilizers; OR
	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	Install temporary coverings; OR
	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
ALL CATEGORIES	Any other control measures approved by the CEC CPM as equivalent to the methods specified in Table 1 may be used.

TABLE 2
TRACK-OUT CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the CEC CPM as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTROL MEASURES FOR WIND CONDITIONS EXCEEDING 25 MPH

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	Cease all active operations; OR
	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
	Apply chemical stabilizers prior to wind event; OR
	Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR
	Take the actions specified in Table 1, Item (3c); OR
	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	Apply chemical stabilizers prior to wind event; OR
	Apply water twice [once] per hour during active operation; OR
	Stop all vehicular traffic.
Open storage piles	Apply water twice [once] per hours; OR
	Install temporary coverings.
Paved road track-out	Cover all haul vehicles; OR
	Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

ATTACHMENT 3

ATTACHMENT 3

CONDITIONS OF CERTIFICATION

ENERGY COMMISSION STAFF CONDITIONS

These conditions are not included in the District's Determination of Compliance. For the purposes of these conditions, the following definitions apply:

(1) ACTIVE OPERATIONS shall mean any activity capable of generating fugitive dust, including, but not limited to, earth moving activities, construction/ demolition activities, or heavy- and light-duty vehicular movement.

(2) CHEMICAL STABILIZERS mean any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

(3) CONSTRUCTION/DEMOLITION ACTIVITIES are any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

(4) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified 'from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust.

(5) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(6) EARTH-MOVING ACTIVITIES shall include, but not be limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, or soil mulching.

(7) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result 'of the activities of man.

(8) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of ten consecutive days.

(9) STABILIZED SURFACE means:

(A) any disturbed surface area or open storage pile which is resistant to wind-driven fugitive dust;

(B) any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.

(10) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper

under normal operating conditions.

AQ-SC1. The project owner shall implement a CEC CPM approved fugitive Dust Control Plan.
Protocol: The plan shall include the following:

1. A description of each of the active operation(s) which may result in the generation of fugitive dust;
2. An identification of all sources of fugitive dust (e.g., earth-moving, storage piles, vehicular traffic, etc.
3. A description of the control measures to be applied to each of the sources of dust emissions identified above (including those required in AQ-SC2 and -SC3 below). The description must be sufficiently detailed to demonstrate that the applicable best available control measure(s) as specified in Table 1 (attached) will be utilized and/or installed during all periods of active operations;
4. In the event that there are special technical (e.g., non-economic) circumstances, including safety, which prevent the use of at least one of the required control measures for any of the sources identified, a justification statement must be provided to explain the reason(s) why the required control measures cannot be implemented.

Verification: Not later than sixty (60) days prior to the commencement of construction, the project owner shall submit the plan to the CEC CPM for review and approval. The project owner shall maintain daily records to document the specific actions taken pursuant to the plan and Table 1. A summary of the monthly activities shall be submitted to the CPM via the Monthly Compliance Report.

AQ-SC2. During the construction phase of the project, the project owner shall:

1. Prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations, or take at least one of the actions listed in Table 2 (attached) to prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations;
2. Install and use a track-out control device to prevent the track-out of bulk material from areas containing soils requiring corrective to other areas within the project construction site and laydown area;
3. Minimize fugitive particulate emissions from vehicular traffic on paved roads and paved parking lots on the construction site by vacuum mechanical sweeping or water flushing of the road surface to remove buildup of loose material. The project owner shall inspect on a daily basis the conditions of the paved roads and parking lots to determine the need for mechanical sweeping or water flushing.

Verification: The project owner shall maintain a daily log during the construction phase of the project indicating: 1) the manner in which compliance with this condition or Table 2 is achieved, and 2) the date and time when the inspection of paved roads and parking lots occurs and the date and time(s) when the cleaning operation occurs. The logs shall be made available to the California Energy Commission CPM upon request.

AQ-SC3. At any time when fugitive dust from OMGP project construction is visible in the atmosphere beyond the property line, the project owner will identify the source of the fugitive dust and implement one or more of the appropriate control measures specified in Table 3 (attached).

Verification: The project owner will maintain a daily log recording the dates and times that measures in Table 3 (attached) have been implemented and make them available to the CPM upon request.

AQ-SC4. The project owner shall implement an approved Construction Equipment Plan. The Plan shall identify how the project owner will ensure that all heavy equipment, that includes, but is not limited to, bulldozers, backhoes, compactors, loaders, motor graders and trenchers, and cranes, dump trucks and other heavy duty construction related trucks, used on-site by construction contractors and subcontractors:

a. are properly maintained;
b. use low sulfur diesel fuel, 50 ppm sulfur or less;
c. limit idling times; and
d. meet federal emission standards for construction equipment.

Verification: Not later than sixty (60) days prior to the commencement of construction, the project owner shall submit the plan to the California Energy Commission CPM for review and approval. The project owner shall maintain records to document the specific actions taken pursuant to the plan. A summary of the monthly activities shall be submitted to the CPM via the Monthly Compliance Report.

AQ-SC5. The project owner shall ensure that all heavy earthmoving equipment including, but not limited to, bulldozers, backhoes, compactors, loaders, motor graders and trenchers, and cranes, dump trucks and other heavy duty construction related trucks, have been properly maintained and the engines tuned to the engine manufacturer's specifications. The project owner shall also install oxidizing soot filters on all suitable construction equipment used either on the power plant construction site or associated linear construction sites. Where the oxidizing soot filter is determined to be unsuitable, the owner shall install and use an oxidizing catalyst. Additionally, the project· owner shall employ high pressure fuel injection; timing retardation, and reduced idle time on all suitable construction equipment. Suitability is to be determined by an independent California Licensed Mechanical Engineer or a Qualified Environmental Professional who will stamp and submit for approval an initial and all subsequent Suitability Reports as necessary containing at a minimum the following:

Initial Suitability Report:

- The initial suitability report shall be submitted to the CPM for approval 60 days prior to the relevant equipment being used at the project site.
- A list of all fuel burning, construction related equipment used,
- A determination of the suitability of each piece of equipment to work appropriately with an oxidizing soot filter, or an oxidizing catalyst,
- If a piece of equipment is determined to be suitable, a statement by the equipment or catalyst manufacturers, the independent California Licensed Mechanical Engineer, or a Qualified Environmental Professional that the oxidizing soot filter has been installed and is functioning properly,
- if a piece of equipment is determined to be unsuitable, an explanation by the equipment or catalyst manufacturers, the independent California Licensed Mechanical Engineer, or a Qualified Environmental Professional as to the cause of this determination, and
- A statement by the equipment or catalyst manufacturers, the California Licensed Mechanical Engineer, or a Qualified Environmental Professional as to the suitability of using high-pressure fuel injectors, timing retardation and/or reduced idle time on all construction equipment after the installation of either oxidizing soot filters or oxidizing catalysts.

Subsequent Suitability Reports

- If a piece of construction equipment is subsequently determined to be unsuitable for an oxidizing soot filter after such installation has occurred, the filter may be removed immediately. However, notification must be sent to the CPM for approval containing an explanation for the change in suitability within 10 days.

- Changes in suitability are restricted to three explanations, which must be identified in any subsequent suitability report. Changes in suitability may not be based on the use of high-pressure fuel injectors, timing retardation and/or reduced idle time.

  1. The oxidizing soot niter is reducing normal availability of the construction equipment due to increased downtime, and/or power output due to increased back pressure by 20% or more.

  2. The oxidizing soot filter is causing or reasonably expected to cause significant damage to the construction equipment engine.

  3. The oxidizing soot filter is causing or reasonably expected to cause a significant risk to nearby workers or the public.

Changes in suitability may not be based on the use of high-pressure fuel injectors, timing retardation and/or reduced idle time.

Verification: The project owner shall submit to the CPM, via the Monthly Compliance Report, documentation, which demonstrates that the contractor's heavy earthmoving equipment is properly maintained and the engines are tuned to the manufacturer's specifications. The project owner shall maintain all records on the site for six months following the start of commercial operation. The project owner will submit to the CPM for approval, the initial suitability report stamped by an independent California Licensed Mechanical Engineer or a Qualified Environmental Professional, 60 days prior to breaking ground on the project site. The project owner will submit to the CPM for approval, subsequent suitability reports as required, stamped by an independent California Licensed Mechanical Engineer or a Qualified Environmental Professional, no later than 10 working days following a change in the suitability status of any construction equipment.

AQ-SC6. The owner/operator shall provide a mitigation fee, for potential PM10 and PM10 precursor impacts, to the District APCO to provide PM10 and PM10 precursor reductions throughout the District. The amount of the fee shall equal $1.2 million escalated at a rate equal to the Consumer Price Index from October 31, 2003 until the payment is made. The payment shall be made no later than 14 months prior to "first fire" of either turbine, or October 31, 2006, whichever is first. The fees shall be provided to the District, who with guidance from CARB or the CEC, will allocate the funds to programs such as the Lower-Emission School Bus Retrofit Program, the Carl Moyer program, or some other program designed to reduce PM10 and PM10 precursor emission in the District.

The District shall preferentially make available the mitigation fee funds to the Sweetwater Union High, the San Ysidro Elementary, the South Bay Elementary, or the Chula Vista Elementary Districts for school bus retrofits. The preference shall be in the form of a first right of refusal given to the above districts for no more than 2 years from the date of the first fee payment by the project owner. Any mitigation fee funds not used by the above school districts or available after 2 years from the date of the first fee payment by the project owner shall be made available for other program- appropriate emission reductions through the District's program.

Verification: No later than 20 days after delivery of the mitigation payment to the District, the project owner/operator shall provide to the CEC CPM a letter (or copy thereof) 'from the District APCO indicating receipt of the payment.

AQ-SC7. The owner/operator shall assign to the project all PM10, VOC and SOX emission reductions that occur intentionally or incidentally during the formation of the NOx MERC for the project. The PM10, VOC and SOx emission reductions are part of the PM10 and PM10 precursor mitigation for the project.

Verification: The owner/operator shall provide a letter assigning to the project, and for the life of the project, all PM10, VOC and SOX emission reductions that occur intentionally or incidentally during the formation of the project's NOx MERCs. The letter shall be provided to the CEC CPM with the surrender of the ERC and MERC certificates identified in Condition AQ-57.

AQ-SC8. The emissions of particulate matter less than 10 microns (PM10) from the Wet Surface Air Cooler shall not exceed 0.1 lbs/hr, based on design specifications limiting circulating water flow rates to no more than 5 million gallons per hour and warranties limiting drift to no more than 0.0006%.

Verification: The project owner shall provide copies of Wet Surface Air Cooler specifications and a vendor warranty of the drift efficiency to the CEC CPM 60 days prior to WSAC equipment delivery on site.

AQ-SC9. Compliance with the WSAC PM10 emission limit shall be determined by circulating water sample analysis by independent laboratory within 60 days of initial operation and quarterly thereafter.

Verification: The results and field data collected from cooling tower blowdown water samples analysis shall be submitted to the CPM and the District as part of the quarterly reports required in Condition AQ-~~64.~~38.

AQ-SC10. The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or EPA, and any revised permit issued by the District or ~~.~~EPA, for the project.

Verification: The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

DISTRICT OTAY MESA GENERATING FDOC CONDITIONS

General Conditions

AQ-1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-2. This equipment shall be properly maintained and kept in good operating condition at all times.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-3. The ~~permittee shall provide access, facilities, utilities, *and any necessary safety equipment for source testing and inspection* upon request of the Air Pollution Control District.~~ unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request.

~~**Verification:** The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.~~

~~**AQ-4.** *The permittee shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment.*~~

~~***Verification:*** The project owner shall *provide copies of the design details of the ancillary equipment to be installed, including emergency engines to the CPM and the District at least 90 days prior to the delivery of the equipment to the project site.*~~

~~**Construction (At Or Prior To Initial Firing) Conditions**~~

~~**AQ-5.** At least 90 days prior to on-site delivery of the equipment, the applicant shall submit to the District the final selection and design details of the gas turbines and associated equipment to be installed, including all proposed post- combustion control systems and the auxiliary boiler. Such information may be submitted to the District as Trade Secret and confidential pursuant to District Rules 175 and 176.~~

Verification: The project owner~~ shall provide copies of design details of the gas turbines and associated equipment to be installed, including all proposed post- combustion control systems (SCONOx or SCR) to the CPM and the District at least 90 days prior to the start of rough grading.~~ shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-4. The project owner shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances.

~~**AQ-6.** *The exhaust stacks for each turbine power station shall be at least 160 feet (48.8 meters) in height.*~~

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

~~**Verification:** *The project owner shall provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post- combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.*~~

AQ-5. The emissions of any single federal hazardous air pollutant (HAP) shall not equal or exceed 10 tons, and the aggregate of all federal HAPs, shall not equal or exceed 25 tons in any rolling 12 calendar month period. Compliance with the HAP limits shall be based on a surrogate VOC/HAP correlation factor determined during initial source testing. If emissions exceed these limits, the project owner shall apply to amend this permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR 63.

~~**AQ-7.** *The exhaust stacks for each turbine power station shall be equipped with source test ports and platforms*~~

to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Appendix Figure 2.

Verification: *The emissions of any single federal hazardous air pollutant, and the aggregate of all federal hazardous air pollutants, shall not equal or exceed 10 tons or 25 tons, respectively, in any continuous 12 calendar month period. If emissions exceed these limits, the permittee shall apply to amend these limits and conduct a case-by case Maximum Achievable Control Technology (MACT) analysis* in accordance with applicable *federal EPA regulations*.

Verification: The project owner shall provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post-

AQ-6. Access, facilities, utilities *and any necessary safety equipment for source testing and inspection* shall be provided upon request of the Air Pollution Control District.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.

AQ-7. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: The project owner shall make the site and records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-8. *This equipment shall be fired on natural gas only. The sulfur content of the natural gas used shall not exceed 0.75 grains per 100 standard cubic feet of natural gas.* The applicant shall maintain quarterly records of fuel sulfur content (grains of sulfur compounds per 100 set of natural gas) and higher heatingThe project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act.value (Btu/set) and**Verification:** The project owner shall make thesethe records available to District personnel *upon request. Specifications, including sulfur content and higher heating value, of all natural gas, other than Public Utility Commission (PUC) regulated natural gas, shall be submitted to the District for written approval prior to use.* **Verification:** These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-9. Prior to *initial firing of each turbine*, a Continuous Emission Monitoring System (CEMS) shall be installed and calibrated to measure the concentrations of oxides of nitrogen (NOx), carbon monoxide (CO), and oxygen (O2) in the exhaust gas on a dry basis, corrected to 15% oxygen. Upon initial firing, the permanent CEMS system, which has been properly calibrated, shall be operational. At least 60 days prior to the operation of the permanent CEMS, The total aggregate annual emissions from all emission units at the stationary source shall not exceed 100 tons of oxides of nitrogen (NOx), calculated as nitrogen dioxide, *and shall not exceed 316 tons of carbon monoxide (CO) for each consecutive 12*-calendar month period. The NOx and CO emissions shall begin accruing at the *initial firing of each turbine*. Compliance with this limit shall be verified using the CEMS system on each gas turbine as well as EPA- or ARB- *certified NOx emissions factors, testing results, or other representative emissions information for all other combustion equipment*. the applicant shall submit an operating protocol to the District for written approval.The CEMS shall remain in full operation at all times when the turbine is in operation. The permanent CEMS shall be properly installed, certified, and in full operation prior to on-going operations.

Verification: The project owner shall provide copies of the operating protocol for the CEMS system to the District, for written approval, and to the CPM at least 60 days prior to operation of the CEMS system.

AQ-10. At least 60 days prior to initial firing of the gas turbines, the applicant shall submit a protocol to the District, for written approval, that shows how the permanent CEMS will be able to meet all District monitoring requirements and measure NOx emissions at a level of 1.0 ppmv plus or minus 10%. In the event that CEMS or testing technology to measure NOx emissions at a level of 1.0 ppmv is not commercially available 60 days prior to initial startup, the applicant shall submit a report to the District regarding the status of the development of such technology. If the principal impediment to meeting the 10% relative accuracy requirement is the test method, the applicant shall propose an alternative measurement technique, for District and US EPA approval. If the CEMS installed by the applicant is unable to meet the 10% relative accuracy requirement, the applicant shall include in the annual relative accuracy report to the District, a reassessment for the commercial availability status for the technology. If the technology for the CEMS to meet the required accuracy becomes commercially available, the applicant shall retrofit the CEMS with such technology within 1 year of becoming available.

Verification: The project owner shall provide copies of the operating protocol for the CEMS system or a CEMS development status to the District, for written approval, and the CPM at least 60 days prior to the initial startup. If the principal impediment to meeting the 10% relative accuracy requirement is the test method, the applicant shall propose an alternative measurement technique, for District and US EPA approval. If the CEMS installed by the applicant is unable to meet the 10% relative accuracy requirement, the applicant shall include in the annual relative accuracy report to the District, a reassessment for the commercial availability status for the technology. If the technology for the CEMS to meet the required accuracy becomes commercially available, the applicant shall retrofit the CEMS with such technology within 1 year of becoming available.

AQ-11. At least 60 days prior to initial firing of the gasturbines, the applicant shall submit a protocol to the District for approval which shall specify a method for determining the CO/VOC surrogate relationship that shall be used to demonstrate compliance with all VOC emission limits.

Verification: The project owner shall provide copies of the operating protocol for the CO/VOC surrogate relationship used to demonstrate compliance with all VOC limits to the District, for written approval, and the CPM at least 60 days prior to the initial firing of the gas turbines.

AQ-12. *Prior to initial firing, each turbine shall be equipped with continuous monitors to measure or calculate and record the following operational characteristics of each unit:*

natural gas flow rate (scfh), heat input rate (MMBtu/hr),
exhaust gas flow rate (dscfm), exhaust gas temperature (°F), and power output (gross MW).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. This protocol, which shall include calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial firing of the gas turbines. The monitors shall be in full operation at all times when the turbine is in operation.

Verification: *The project owner shall provide copies of the operating protocol, including the calculation methodology for the CEMS system or a CEMS development status to the District, for written approval, and the CPM at least 60 days prior to initial firing of the gas turbines.*

AQ-13. *All CEMS shall be certified, calibrated, maintained, and operated for the monitoring of NOx and CO in accordance with applicable regulations including the requirements of Sections 60.7(c), 60.7(d), and 60.13 of Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Performance Standards of Appendix B of 40 CFR 60, Quality Assurance Procedures of Appendix F of 40 CFR 60 and 40 CFR 75, and a protocol approved in writing by the District.*

Verification: *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*

AQ-14. The District shall be notified in writing at least two (2) weeks prior to any proposed changes to be made in any Continuous Emission Monitor (CEM) software which affects the value of data displayed on the CEM monitors with respect to the parameters measured by their respective sensing devices.

Verification: The project owner shall provide notices of any proposed changes made to the CEM software, which affects the value of data displayed on the CEM monitors with respect to the parameters measured by their respective sensing devices, to the District and the CPM at least two (2) weeks prior to the changes.

AQ-15. No later than 90 days after each unit commences commercial operation, a *Relative Accuracy Test Audit (RATA)* shall be performed on the permanent CEMS in accordance with 40 CFR Part 75 Appendix A Specifications and Test Procedures. At least 45 days prior to the test date, the applicant shall submit a test protocol to the District for written approval. Additionally, the District shall be notified a minimum of 45 *days prior to the test so that observersmay be present.* Within 45 days of completion of this test, a written test report shall be submitted to the District for approval.

Verification: The project owner shall provide copies of the CEMS RATA test to the District and the CPM no later than 90 days after each unit commences commercial operation. The project owner shall provide notice of the CEMS RATA test date and provide a CEMS RATA test protocol to the District and the CPM at least 45 days prior to the tests. The project owner shall provide a written CEMS RATA test report to the District, for approval, and the CPM within 30 days of the test.

AQ-16. The total aggregate annual emissions from all emission units at the stationary source shall not exceed 100 tons of oxides of nitrogen (NOx) *and shall not exceed 316 tons of carbon monoxide (CO) for each consecutive 12* calendar month period. The NOx and CO emissions shall begin accruing at the initial firing of each turbine. Compliance with this limit shall be verified using the CEMS system on each gas turbine (Application Nos. 973880 and 973881 as well as EPA or ARB *certified NOx emissions factors, testing results, or other representative emissions information for all other combustion equipment*,
including the auxiliary boiler.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx and, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. T he information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.38.

AQ-17. The total aggregate emissions of volatile organic compounds (VOC) from all emission units at the

stationary source shall not exceed 47.5 tons for each consecutive 12-calendar month period. The VOC emissions shall begin accruing at the initial firing of each piece of equipment. Compliance shall be verified using testing results, EPA- or ARB-certified VOC emissions factors, and/or other representative emissions information for all other combustion**10.** The total aggregate emissions of volatile organic compounds (VOC) from all emission units at the stationary source shall not exceed 47.5 tons for each consecutive 12-calendar month period. The VOC emissions shall begin accruing at the initial firing of each piece of equipment. Compliance shall be verified using testing results, EPA- or ARB-certified VOC emissions factors, and/or other representative emissions information for all other combustion equipment. equipment, including the auxiliary boiler.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx and CO, in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-18. *The applicant shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO and VOC, in tons per year, from all* equipment, including the auxiliary boiler, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and made available to District personnel upon request.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO and VOC, in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-19. To ensure compliance with District Rule 69.2 and except during any period of time for which a variance from Rule 69.2 has been granted by the Air Pollution Control District Hearing Board, the emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from the auxiliary boiler shall not exceed 30 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 3% oxygen and the emissions of carbon monoxide (CO) from the auxiliary boiler shall not exceed 400 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 3% oxygen.

Verification: The project owner shall maintain records of the NOx and CO emission concentrations from the auxiliary boiler for all operating conditions. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-20 *To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution Control District Hearing Board, when operating without any post-combustion air pollution control equipment, the emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine shall not exceed 19.8 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 15% oxygen, excluding startups and shutdowns as defined in District Rule 69.3.1.*

Verification: *The project owner shall maintain records of the NOx emission concentrations of each gas*

turbine when operating with post-combustion air pollution control equipment. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-21. To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution Control District Hearing Board, when operating with post- combustion air pollution control equipment, emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine shall not exceed 11.8 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 15% oxygen, excluding startups and shutdowns as defined in District Rule 69.3.1.

Verification: The project owner shall maintain records of the NOx emission concentrations of each gas turbine when operating with post-combustion air pollution control equipment. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-22. The total emissions from both turbines combined shall not exceed 1133 pounds per hour of oxides of nitrogen (NOx), calculated as nitrogen dioxide and averaged over a 1-hour period. These emissions limits shall apply during startups and shutdowns.

Verification: The project owner shall maintain records of the NOx mass emissions of each gas turbine when operating without any post-combustion air pollution control equipment. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-23. When operating with post-combustion air pollution control equipment, the total emissions from both turbines combined shall not exceed 412 pounds per hour of oxides of nitrogen (NOx), calculated as nitrogen dioxide and averaged over a 1-hour period. Additionally, when operating with post-combustion air pollution control equipment, the total emissions when only one turbine is in operation shall not exceed 283 pounds per hour of NOx, calculated as nitrogen dioxide and averaged over a rolling continuous 1-hour period. These emissions limits shall apply during startups and shutdowns.

Verification: The project owner shall maintain records of the NOx mass emissions of each gas turbine when operating without any post-combustion air pollution control equipment. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air*. Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-24. The total emissions from both turbines combined shall not exceed 2738 pounds per hour of carbon monoxide (CO), averaged over a 1-hour period. These limits shall apply during startups and shutdowns.

Verification: The project owner shall maintain records of the CO emission concentrations of each gas turbine when operating, including startup and shutdowns. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

Commissioning Period Conditions

AQ-25. Beginning at initial firing of each turbine, a "Commissioning Period" for each turbine shall commence. This Commissioning Period shall end 120 days after initial firing or immediately after written acceptance of clear custody and control of the equipment is turned over to the applicant, whichever comes first. During this Commissioning Period, only the requirements specified in Condition Nos. AQ-9, 12, 16, 17, 18, 19, 20, 21, 22, 23, and 24 shall apply.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating during the commissioning period. These records shall be included in the Commissioning Period Progress Report required in AQ-24, and maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-26. Within 30 operating days after initial firing of each turbine, the applicant shall install post-combustion air pollution control equipment to minimize emissions from this equipment. The applicant may request an extension, not to exceed an additional 30 days, in writing for District approval. This request shall include all technical reasons as to why the extension is needed. Such an extension will only be granted if the applicant can demonstrate that such extension:

(a) is not the result of neglect or disregard of any air pollution control requirement;
(b) is not intentional or the result of negligence, as defined in District Rule 98;
(c) is not the result of improper maintenance; (d) will not cause a nuisance;
(e) is not likely to create an immediate threat or hazard to public health or safety;
(f) will not interfere with the attainment or maintenance of any National or California Ambient Air Quality Standard; and
(g) good cause is shown for the extension.

Once installed, the post-combustion air pollution control equipment shall be maintained in good condition and shall be in full operation at all times when the turbine is in operation. Note that any day in which fuel is burned in this equipment shall be considered an operating day.

Verification: The project owner shall install post combustion air pollution control equipment to minimize emissions from this equipment within 30 days after the initial firing of the gas turbines, unless the project owner requests an extension, not to exceed an additional 30 days, in writing for District approval.

AQ-27. Within 10 days after the end of the Commissioning Period for each turbine, the applicant shall submit a written progress report to the District. This report shall include, at a minimum, the date that the Commissioning Period ended, the periods of startup, the emissions of NOx and CO during startup, and the emissions of NOx and CO during steady state operation with and without power augmentation. Emissions shall be in both ppmv and lbs/hr. This report shall also detail any turbine or emission control equipment malfunction, upsets, repairs, maintenance, modifications, or replacements affecting emissions of air contaminants that occurred during the Commissioning Period.

Verification: The project owner shall submit a Commissioning Period Progress Report for each gas turbine to the District and the CPM within 10 days after the end of each gas turbine commissioning period.

Conditions For On-Going Operations

AQ-28. *For the purposes of this Determination of Compliance and Authority to Construct, the period described as "on-going" operation of the turbines shall commence immediately following the end of the*

Commissioning Period. Condition Nos. AQ-9, 12, 16, 17, 18, 19, 20, 21, 22 and 23 *shall continue to apply during on-going operations.*

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-29. *Continuous monitors shall be installed on each turbine to monitor or calculate and record the following:*

- ammonia stack concentration (ppmvd, corrected to 15% oxygen), and
- ammonia injection rate (lbs/hr).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. This protocol, which shall include calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial 'firing of the gas turbines with the SCR system. *The monitors shall be in full operation at all times when the turbine is in operation.*

Verification: The project owner shall provide copies of the CEMS installation, calibration, and maintenance protocol, including the calculation methodology, to the District for written approval, and the CPM at least 60 days prior to initial firing of the gas turbines with the SCR system.

AQ-30. The *emissions of ammonia (slippage) from each gas turbine exhaust stack shall not exceed* 10.0parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a rolling continuous 1-hour period.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the* The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-31.11. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each rolling continuous1-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified through an initial source testand annual source testing thereafter. . This limit shall not apply to the first fifteen 1-hour average NOx emissions measurements above 2.0 ppmvd corrected to 15% oxygen in any rolling 12-month period for each gas turbine provided the following requirements are met:

a. Thisthis equipment operates under any one of the following:

Ai) Rapid combustion turbine load changes due to the following conditions:BA) Load changes

initiated by the California Independent Systems Operator (ISO) or a successor entity when the plant is operating under Automatic Generation Control; or

~~C~~B) Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load

ii) The first two 1-hour reporting periods following the initiation or shutdown of a system injection pump

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

iv) Events as the result of technological limitation identified by the operator and approved in writing by the District.

b. ~~The~~the 1-hour average NOx emissions above 2.0 ppmvd corrected to 15% oxygen did not occur as a result of operator neglect, improper operation or maintenance, ~~or~~and is a qualified breakdown under District Rule 98.

c. ~~The~~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 by5:00pm the next business day following the qualified operating condition~~. The notations in the log ~~and CEMS~~ shall describe the data and time of entry into the log~~/CEMS~~ and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmvd 1-hour average limit.

d. ~~The~~the 1-hour average NOx concentration for periods that result from a qualified operating condition described in (a) above does ~~no~~not exceed 25 ppmvd corrected to 15% oxygen. All NOx ~~Emissions~~emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by ~~this FDOC~~the Permit to Operate.

Verification: ~~The project owner shall maintain records of the *mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition*, including documentation of compliance of any NOx limit excursions that are allowed under this condition, shall be included in the quarterly reports required in Condition AQ-64.~~ The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition* shall be included in the quarterly reports required in Condition AQ-38.

AQ-12. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 110 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. This limit shall apply at all times, including periods of startup and shutdown. Compliance with this limit shall be based on CEMS data for each unit as averaged in accordance with 40 CFR 60 Subpart GG Subsection 60.334.

Verification: The project owner shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-13. Excess emissions, as defined in 40 CFR 60 Subpart GG Subsection 60.334, shall be reported pursuant for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be postmarked by the 30th day following the end of each calendar 6-month period unless more frequent reporting is required in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be submitted to the District's Compliance Division.

Verification: These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-~~32.~~14. The emissions of carbon monoxide (CO) from each turbine shall not~~,~~ exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with these limits shall be based on CEMS data for each unit and averaged over each ~~rolling~~ continuous 3-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified ~~through an initial emissions source test and at least~~ annual source testing ~~thereafter~~.

Verification: The project owner shall maintain records ~~of the mass emissions and concentrations *of each gas turbine when operating*~~, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~33.~~ 15. The emissions of volatile organic compounds (VOC) from each turbine, ~~,~~calculated as methane, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CO CEMS data for each unit, averaged over each ~~rolling continuous~~1-hour period ~~or portion thereof~~, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation, and the District approved CO/VOC surrogate relationship. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on ~~an initial emissions source test and at least~~ annual source testing ~~thereafter~~.

Verification: The project owner shall maintain records ~~of the mass emissions and concentrations of each gas turbine when operating~~, at least on a calendar monthly basis, of total aggregate mass emissions of NOX, CO, and VOC in tons per year, from all equipment, excluding exempt equipment, at this stationary source for the previous 12-month period. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~34.~~ 16. When operated ~~without duct firing~~with the duct burner at or below 38.8 MMBtu/hr heat input, the emissions from each turbine shall not exceed the following ~~emission~~emissions limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS) ~~and~~continuous monitors and, the District approved CO/VOC surrogate relationship, an/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a ~~rolling~~ continuous 3 -hour averaging period and compliance with the VOC limit shall be based on a 1-hour averaging period.

Pollutant	**Emission Limit, lbs/hr**
Oxides of Nitrogen, NOx (calculated as NO2)	13.14
Carbon Monoxide, CO	24.0
Volatile Organic Compounds, VOC	4.58

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating ~~without~~with power augmentation. These records shall be maintained ~~onsite~~on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) ,and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~35.~~ 17. When operated with the duct ~~firing~~burner above 38.8 MMBtu/hr heat input, the emissions from this equipment shall not exceed the following emission limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and ~~continuous monitors and~~/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a ~~rolling~~ continuous 3-hour averaging period and compliance with the VOC limit shall be based on a ~~rolling continuous~~ 1-hour averaging period.

Pollutant	**Emission Limit, lbs/hr**
Oxides of Nitrogen, NOx (calculated as NO2)~~.~~	15.95
Carbon Monoxide, CO	29.13
Volatile Organic Compounds, VOC	5.56

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating with power augmentation. These records shall be maintained on site for a minimum of five years and shall be available
for inspection by representatives of the District, California Air Resources Board (CARB).
and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~36.~~ 18. *The emissions of particulate matter less than 10 microns (PM10)* from each turbine shall not exceed 9.0 lbs/hr when operated with the duct burner at or below 38.8 MMBtu/hr heat input and shall not exceed 11.5 lbs/hr from each turbine when operated with the duct burner above 38.8 MMBtu/hr. Compliance with this limit shall be based on annual source testing (only with the duct burner operating in accordance with AQ-21).

Verification: The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests.

AQ-19. Except during startups and shutdowns, the *emissions of ammonia (slippage) from each gas turbine exhaust stack shall not exceed 10.0 parts per million by volume on a dry basis (ppmvd) corrected to* 15% oxygen and averaged over a 1-hour period. Compliance with this limit shall be based on a District approved calculation methodology and verified during annual source testing.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-20. Fuel consumption by the duct burners for both turbines shall not exceed 3,881,000 MMBtu (HHV) per rolling 12-month period. ~~Each time one or both turbines are operated with duct firing~~Whenever the duct burners are in operation, the CEMS shall record the dates and fuel consumption for each duct burner. The CEMS shall also record the total duct burner fuel usage for each rolling 12-month period (in MMBtu). The applicant shall maintain a log that contains, at a minimum, the dates and fuel usage when one or both turbines are operated with duct firing. These records shall be maintained on site for a minimum of five years and made available to District personnel upon request.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating with power augmentation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB)

and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~37.~~ 21. When operated under startup conditions, the emissions from each turbine shall not exceed the following emission limits, averaged over each 1-hour period, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors and/or District approved emission source testing:

Pollutant	**Emission Limit, lbs/hr**
Oxides of Nitrogen, NOx (calculated as NO2)	240.0
Carbon Monoxide, CO	2706
Volatile Organic Compounds, VOC	48.0

AQ-~~38.~~ 22. When operated under startup or shutdown conditions, the emissions from each turbine shall not exceed the following emission limits, totaled per event, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors~~.~~ and/or District approved emission source testing:

Pollutant (during startups)	**Emission Limit, lbs/ event**
Oxides of Nitrogen, NOx (calculated as NO2)	480
Carbon Monoxide, CO	5412
Volatile Organic Compounds, VOC	96

Pollutant (during ~~startups~~shutdowns)	**Emission Limit, lbs/ event**
Oxides of Nitrogen, NOx (calculated as NO2)	80
Carbon Monoxide, CO	902
Volatile Organic Compounds, VOC	16

Verification: The project owner shall maintain records of the duration startups and shutdowns of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~ 38.

AQ-23. Startup for each gas turbine shall be defined as the period beginning with the introduction of fuel to the combustion turbine following a non-operational period and ending after the lesser of either 360 minutes of continuous of fuel flow or when the CEMS records ten consecutive one-minute data points in compliance with the emission concentration limits of Conditions 11, 14, and 19 for the gas turbine. Excluding extended startups and the first 120 minutes of all other startups, the gas turbines shall comply with a NOx emission concentration limit of 11.8 ppmvd corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period. For the purposes of this Permit to Operate, an extended startup shall be defined as the time during any startup when the steam turbine inner casing temperature is less than or equal to 500 °F.

~~**AQ-39.** Startup for each gas turbine shall be defined as the period beginning with the introduction of fuel to the equipment and ending when the CEMS records two consecutive data points in compliance with the emission concentration limits of Condition AQ-31 for the gas turbine, not to exceed 6.0 hours.~~

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. *These*

records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

~~**Verification:** The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.~~

AQ-24. During startups, including extended startups as defined in Condition 23, excluding the first 120 minutes of the startup, NOx emissions from the gas turbine shall not exceed 42 ppm corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period.

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-~~40.~~25. Shutdown for each gas turbine shall be defined as the ~~period beginning when the CEMS records a single data point not in compliance with the emission concentration limits of Condition AQ-31 and ending with~~60-minute period preceding the termination of fuel flow to the gas turbine~~, not to exceed 1.0 hours~~.

Verification: The project owner shall maintain records of the duration of all shutdowns of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~38.

AQ-~~41.~~ ~~Both gas turbines shall not be operated simultaneously in startup mode.~~**26.** Both gas turbines shall not be operated simultaneously in startup mode. ~~Additionally, the auxiliary boiler shall riot be operated in startup mode simultaneously with either turbine.~~

Verification: The project owner shall maintain records of the duration of all startups of each gas turbine. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-27. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein.

Verification: All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request.

AQ-28. *For each emission limit expressed as pounds per hour or parts per million based on a 1-hour averaging period, compliance shall be based on each 1-clock hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data*. A valid clock hour shall be defined as one that includes at least 16 minutes of valid 1-minute data or includes a data point from at

least two different quadrants that are spaced at least 15 minutes apart. A duct burner clock hour shall be defined as a valid clock hour in which the duct burner heat input exceeds 38.8 MMBtu/hr.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-29. For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on rolling 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data.

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-30. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of: -Sections 75.10 and 75.12 of Title 40 -Code of Federal Regulations Part 75 (40 CFR 75) -the performance specifications of Appendix A of 40 CFR 75 -the quality assurance procedures of Appendix B of 40 CFR 75 -the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60.

Verification: The project owner shall maintain records of all CEMS certification and maintenance. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the* Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-31. When the CEMS is not recording data and the unit is operating, hourly NOx emissions shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMS during the most recent hours in which the unit operated 3 continuous hours at no less than 80% of full power rating of each power station, either with or without duct firing.

Verification: The project owner shall maintain records of the ~~duration of all startups of each gas turbine and auxiliary boiler.~~ *mass emissions and concentrations of each gas turbine when operating*. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~ 38.

AQ-~~42.~~ ~~*The applicant shall maintain a log of all startups and shutdowns for each turbine and the auxiliary boiler. The log shall contain, at a minimum, the dates and times of each startup or shutdown, and the duration of each startup or shutdown. This log shall be maintained on site for a minimum of five years and made available to District personnel upon request*~~**32.** Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence.

Verification: The project owner shall maintain records of ~~all startups and shutdown of each gas turbine and the auxiliary boiler.~~ any emissions exceedance *of each gas turbine when operating*. These records shall be

maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-~~64.~~ 38.

AQ-~~43.~~ ~~*The emissions of particulate matter less than 10 microns (PM10)* shall not exceed 9.0 lbs/hr when operated without duct firing and shall not exceed 11.5 lbs/hr for each turbine when operated with duct firing. Compliance with this limit shall be based on an initial emissions source test and at least annual source testing thereafter.~~**33.** The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMs Protocol approved by the District.

Verification: ~~The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests~~ The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

~~**AQ-44.** Fuel consumption by the auxiliary boiler shall not exceed 762,120 MMBtu (HHV) per rolling 12-month period. The CEMS shall record the total auxiliary boiler fuel usage for each rolling 12-month period (in MMBtu). The applicant shall maintain a log that contains, at a minimum, the dates, times and fuel consumption during each auxiliary boiler startup and shutdown and the total auxiliary boiler fuel consumption for each rolling 12-month period. These records shall be maintained on site for a minimum of five years and made available to District personnel upon request.~~

~~**Verification:** The project owner shall maintain records of the operation of the auxiliary boiler. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.~~

AQ-34. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

~~**AQ-45.** Once final selection and design details of the auxiliary boiler have been submitted to the District, specific operating parameters defining auxiliary boiler startups and shutdowns shall be established.~~

~~**Verification:** At least 90 days prior to on-site delivery of equipment, the project owner shall provide copies of design details of the auxiliary boiler, including any proposed post combustion control systems to the CPM and the District.~~

AQ-35. Operating logs or Data Acquisition System (DAS) records shall be maintained to record the following:

a. dates of all startups and shutdowns;
b. beginning and end times, to the nearest minute, of all startups and shutdowns;
c. fuel usage, in standard cubic feet, for each clock hour, calendar month, and 12-calendar month period;
d. hours of daily operation; and
e. total cumulative hours per calendar year.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

~~**AQ-46.** The emissions of oxides of nitrogen (NOx) from the auxiliary boiler, calculated as nitrogen dioxide, shall~~

not exceed 9.0 parts per million by volume on a dry basis (ppmvd) corrected to 3% oxygen. Compliance with this limit shall be based on an initial emissions source test and annual source testing thereafter. This limit shall not apply during startups and shutdowns of the auxiliary boiler.

Verification: The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests.

AQ-47. The emissions of carbon monoxide (CO) from the auxiliary boiler shall not exceed 50 parts per million by volume on a dry basis (ppmvd) corrected to 3% oxygen. Compliance with this limit shall be based on an initial emissions. Source test and annual source testing thereafter. This limit shall not apply during startups and shutdowns of the auxiliary boiler.**36.** *Continuous monitors shall be installed on each turbine to monitor or calculate and record the following:*

a. Gas turbine natural gas flow rate (scfh),
b. Duct burner natural gas flow rate (scfh),
c. Gas turbine heat input rate (MMBtu/hr), HHV,
d. Duct burner heat input rate (MMBtu/hr), HHV,
e. Ammonia stack concentration (ppmvd, corrected to 15% oxygen),
f. Ammonia injection rate (lbs/hr),
g. Steam turbine inner casing temperature (ºF),
h. SCR inlet temperature (ºF),
i. Exhaust gas temperature (ºF), and
j. Power output (gross MW).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. *The monitors shall be in full operation at all times when the turbine is in operation.*

Verification: The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-48. The emissions of volatile organic compounds (VOC) from the auxiliary boiler, calculated as methane, shall not exceed *10.0 parts per million by volume on a dry basis (ppmvd) corrected to* 3% oxygen.. Compliance with this limit shall be based on an initial emissions source test and annual source testing thereafter. This limit shall not apply during startups and shutdowns of the auxiliary boiler. .

Verification: The project owner shall provide copies of the initial compliance and annual source test reports to the District and the CEC CPM within 60 days after completion of the compliance or source tests.

AQ-37. *The applicant shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO and VOC, in tons per year, from all* emission units, at this stationary source for the previous 12-calendar month period. These records shall be made available for inspection within 30 calendar days after the end of each calendar month.

AQ-49. Startup for the auxiliary boiler shall be defined as the period beginning with the introduction of fuel to the equipment and ending when the CEMS records two consecutive data points in compliance with the emission concentration limits of Conditions 46, 47 and 48, not to exceed 1 hour.

Verification: The project owner shall maintain records of the duration of startups of the auxiliary boiler. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.* The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-~~50.~~ ~~Shutdown for the auxiliary boiler shall be defined as the period beginning when the CEMS records two consecutive data points not in compliance with the emission concentration limits of Conditions 46, 47 and 48, and ending with the termination of fuel flow to the auxiliary boiler, not to exceed 1 hour.~~**38.** All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. *In addition, quarterly reports of information recorded by these conditions, as specified, shall be sent to the CPM.*

~~**Verification:** The project owner shall maintain records of the duration of shutdowns of the auxiliary boiler. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.~~

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine *during commissioning, optimization, replacement and operation.* These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.

~~**AQ-51.** Within 30 days after completion of the Commissioning Period, an initial Emissions~~**AQ-39.** *This equipment shall be source tested* once each permit year (annual source test~~ shall be conducted on each turbine and on the auxiliary boiler by an independent, Air Resources Board (ARB) approved tester at the applicant's expense to show~~) to demonstrate compliance ~~with all applicable emission limits. A~~with the emission standards specified in AQ-34, 10, and 37. For the purposes of this permit, a permit year is the 12-month period ending on the last day of the permit expiration month. It is the responsibility of the permittee to schedule the source test with the District. The source test shall be performed or witnessed by the District. Each annual source test shall be separated by at least 90 days from any annual source test performed in a different permit year. *If this testing will be performed by someone other than the District, a* source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the following requirements:

a. Measurements of oxides of nitrogen (NOx), carbon monoxide (CO), and stack gas oxygen content (O2) shall be conducted in accordance with *U.S. Environmental Protection Agency (EPA)* Methods 7E, 10 and 3A, respectively, and the San Diego Air Pollution Control District Method 100, or ~~equivalent, as~~alternative methods approved by the ~~*U.S. Environmental Protection Agency (EPA).*~~District and the EPA.

b. Measurements of particulate matter less than 10 microns shall be conducted in accordance with the U.S. Environmental Protection Agency (EPA) Methods 201A and 202, or ~~equivalent, as~~alternative methods approved by the ~~U.S. Environmental Protection Agency (EPA)~~District and the EPA.

c. Measurements of volatile organic compounds (VOC) shall be conducted in accordance with San Diego Air Pollution .
Control District Methods 18 and/or 25A, or ~~equivalent, as~~alternative methods approved by the ~~U.S. Environmental ProtectionAgency (~~District and the EPA~~).~~

d. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management
District (BAAQMD) Method ST-1B, or alternative methods approved by the District and the EPA.

e. Source testing shall be performed ~~at no less than 80% of the turbine rating, without duct firing, at no less than 80% of the turbine rating with duct firing, and at no less than 80% of the auxiliary boiler rating. If the applicant demonstrates~~only with both the combustion turbine and duct burner in operation. The duct burner shall be operated at not less than 80% of the rated heat input unless it is demonstrated to the satisfaction of the District that the ~~turbine~~unit cannot operate ~~at~~under these conditions. If the demonstration is accepted, then the emissions source testing shall be performed at the highest achievable

continuous ~~power rating.~~

~~e. The following additional operating characteristics shall also be measured or calculated and recorded: *natural gas flow rate (scfh),* fuel higher heating value (Btu/set), heat input rate (MMBtu/hr), exhaust gas flow rate (dscfm), exhaust gas temperature (°F), power output (gross MW), if applicable~~ heat input.

f. Source testing shall be performed at not less than 80% of the unit's rated load unless it is demonstrated *to the satisfaction of the District that the* unit cannot operate under these conditions. If the demonstration is accepted, then emissions *source testing shall be performed at the highest achievable continuous power* level.

g. *The following additional operating characteristics shall also be measured or calculated and recorded:*
gas turbine *natural gas flow rate (scfh),*
duct burner *natural gas flow rate (scfh),*
fuel higher heating value (Btu/scf),
gas turbine *heat input rate (MMBtu/hr),*
duct burner heat input rate (MMBtu/hr),
ammonia injection rate (lbs/hr),
SCR inlet temperature (°F),
Exhaust gas temperature (°F),
Power *output (gross MW).*

Verification: The project owner shall make the records *available for inspection by representatives of the District, California Air Resources* Board (CARB) and the Commission.

AQ-40. A *Relative Accuracy Test Audit (RATA)* and all other required certification tests shall be performed and completed on the CEMS *in accordance with applicable* provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 *days prior to the test so that observers may be present.*

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-41. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-42. *Beginning with the start of the ongoing emission reduction monitoring period as defined in "Alternative Mobile Source Emission Reduction Program for Replacing Heavy and Medium Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels Under Rule 27 (c)(1)(vi)" as approved on September 8, 2000 (herein referred to as the Alternative MERC Program), the owner or operator shall, on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year:*

a. for *each ongoing emission reduction monitoring year, based on the quarterly activity levels submitted by the mobile source owners and the applicable calculation method specified in the Alternative MERC Program, perform a calculation of the annual average and annual aggregate ongoing emission reductions and the ongoing emission reduction deficit, if any, for the MERCs surrendered to offset the facility's emissions;*

b. provide *an annual report to the District that summarizes the annual average ongoing emission reductions for each MERC, aggregate ongoing emission reductions, and the ongoing emission reduction deficit, if any, and provides supporting calculations and documentation; and*

c. if *the calculated annual ongoing emission reduction deficit is positive, notify the District, provide a compliance schedule to correct the ongoing emission reduction deficit, and correct the ongoing emission reduction deficit in accordance with Subsection (h)(4) of* the *Alternative MERC Program.*

Verification: *The project owner shall submit an annual MERC report to the District and the CPM on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year.*

***AQ*-43.** *Beginning with the second calendar year following the calendar year that the facility commences operations, the owner or operator shall, on or before March 1 of each calendar year:*

a. based *on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment is less than 0.8;*

b. based *on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment in primary service is less than 0.8; and*

c. if *one or more MERCs fractional employment or fractional employment in primary service is less than 0.8, provide a compliance schedule to correct any MERC shortfall and correct any MERC shortfall in accordance with Subsection (j)(4) of the Alternative MERC Program.*

Verification: *The project owner shall* make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-44. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3-hour period, excluding hours when the equipment is operated under any startup condition. If the project NOx emissions limit is reduced to 1.0 ppm, the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12-month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-45. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this

facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3-*hour period, excluding hours when the equipment is operated under any startup condition.* If the project NOx emissions limit is reduced to 1.0 ppm, *the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12-month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine*.

Verification: The project owner shall make the records available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.

AQ-46. *For the purposes of this Determination of Compliance and Authority to Construct, the period described as "on-going" operation of the turbines shall commence immediately following the end of the Commissioning Period. Condition Nos. AQ-9,* 10, 23, and 37 *shall continue to apply during on-going operations.*

Verification: *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine* when operating. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*

AQ-47. *The permittee shall obtain any necessary District permits for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment.*

Verification: *The project owner shall provide copies of the design details of the ancillary equipment to be installed, including emergency engines to the CPM and the District at least 90 days prior to the delivery of the equipment to the project site.*

AQ-48. *This equipment shall be fired on natural gas only. The sulfur content of the natural gas used shall not exceed 0.75 grains per 100 standard cubic feet of natural gas.* The applicant shall maintain quarterly records of fuel sulfur content (grains of sulfur compounds per 100 set of natural gas) and higher heating value (Btu/set) and shall make these records available to District personnel *upon request. Specifications, including sulfur content and higher heating value, of all natural gas, other than Public Utility Commission (PUC)-regulated natural gas, shall be submitted to the District for written approval prior to use.*

Verification: These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-49. *The applicant shall maintain a log of all startups and shutdowns for each turbine. The log shall contain, at a minimum, the dates and times of each startup or shutdown, and the duration of each startup or shutdown. This log shall be maintained on site for a minimum of five years and made available to District personnel upon request.*

Verification: The project owner shall maintain records of all startups and shutdown of each gas turbine. *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission.* The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-38.

AQ-50. *The applicant shall comply with the continuous emission monitoring requirements of 40 CFR Part 75.*

Verification: *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-*38.

AQ-51. *For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on each continuous 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous monitoring data.*

Verification: *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, startup/shutdown, and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.*

***AQ-*52.** *The exhaust stacks for each turbine power station shall be at least 160 feet* (48.8 meters) in height.

Verification: *The project owner shall provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post- combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.*

AQ-53. *The exhaust stacks for each turbine power station shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Appendix Figure 2.* .

Verification: The project owner shall provide copies of the design details of the gas *turbines and associated equipment to be installed, including all proposed post-*combustion control systems (SCONOx and SCR) to the CPM and the District at least 90 days prior to the start of rough grading.

AQ-54. *Prior to initial firing, each turbine shall be equipped with continuous monitors to measure or calculate and record the following operational characteristics of each unit:*

natural gas flow rate (scfh), heat input rate (MMBtu/hr),
exhaust gas flow rate (dscfm), exhaust gas temperature (°F), and power output (gross MW).

The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol.· This protocol, which shall include calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial firing of the gas turbines. The monitors shall be in full operation

at all times when the turbine is in operation.

Verification: *The project owner shall provide copies of the operating protocol, including the calculation methodology for the CEMS system or a CEMS development status to the District, for written approval, and the CPM at least 60 days prior to initial firing of the gas turbines.*

AQ-55. *All CEMS shall be certified, calibrated, maintained, and operated for the monitoring of NOx and CO in accordance with applicable regulations including the requirements of Sections 60.7(c), 60.7(d), and 60.13 of Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Performance Standards of Appendix B of 40 CFR 60, Quality Assurance Procedures of Appendix F of 40 CFR 60 and 40 CFR 75, and a protocol approved in writing by the District.*

~~**Verification:** This project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.~~

Verification: *These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*

AQ-~~52.~~ ~~*Within 30 days after completion of the Commissioning Period, an initial emissions source test shall be conducted by an independent, ARB approved tester at the applicant's expense to determine the emissions of toxic air contaminants and federal hazardous air pollutants (HAPs). A source test protocol shall be submitted to the District for written approval at least 60* days~~**56** *To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution Control District Hearing Board, when operating without any post- combustion air pollution control equipment, the emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine shall not exceed 19.8 parts per million by volume on a dry basis (ppmvd) calculated over a 1-hour averaging period and corrected to 15% oxygen, excluding startups and shutdowns as defined in District Rule 69.3.1.*~~prior to source testing. The source test shall demonstrate compliance with the following limits (for each turbine):~~

Verification: *The project owner shall maintain records of the NOx emission concentrations of each gas turbine when operating with post-combustion air pollution control equipment. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*

AQ-57. *Within 30 days after completion of the Commissioning Period, an initial emissions source test shall be conducted by an independent, ARB approved tester at the applicant's expense to determine the emissions of toxic air contaminants and federal hazardous air pollutants (HAPs). A source test protocol shall be submitted to the District for written approval at least 60* days prior *to source testing. The source test shall demonstrate compliance with the following limits (for each turbine):*

Pollutant	**Emission Limit, lbs/hr**
Acetaldehyde	0.09
Acrolein	0.01
Benzene	0.03
Ethyl Benzene	0.07
Formaldehyde	0.29
Naphthalene	3.66E-3
Polyaromatic Hydrocarbons (PAHs,)	3.4 E-4

(excluding naphthalene)

Toluene	0.29
Xylene3.66E-3	0.14

3.4 E-4

Verification: This project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

AQ-53. Within 60 days after completion of the initial source tests, a final test report shall be submitted to the District for review and approval. The testing contractor shall include, as part of the test report, a certification that to the best of his knowledge the report is a true and accurate representation of the test conducted and the results.

Verification: This project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

AQ-54. The final test report for the initial source tests shall also include a method for establishing a VOC/HAP surrogate relationship. This relationship, in conjunction with the CO/VOC surrogate relationship, shall be used to show continued compliance with all HAPs emission limits.

Verification: The project owner provide copies of the final source test report with a method to establish a VOC/HAP surrogate relationship to the District, for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

AQ-55. *This equipment shall be source tested* on at least an annual basis to show continued compliance with all applicable emission limits, unless otherwise directed in writing by the District. *If this testing will be performed by someone other than the District, a* source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the following requirements:

a. Measurements of oxides of nitrogen (NOx), carbon monoxide (CO), and stack gas oxygen content shall be conducted in accordance with the San Diego Air Pollution Control District Method 100, or equivalent, as approved by the U.S. Environmental Protection Agency (EPA).

b. Measurements of particulate matter less than 10 microns shall be conducted in accordance with the U.S. Environmental Protection Agency (EPA)' Methods 201A and 202, or equivalent, as approved by the U.S. Environmental Protection Agency (EPA).

c. Measurements of volatile organic compounds (VOC) shall be conducted in accordance with San Diego Air Pollution Control District Methods 18 and 25A, or equivalent, as approved by the U.S. Environmental Protection Agency (EPA).

d. Source testing shall be performed at no less than 80% of the turbine rating without duct firing, at no less than 80% of the turbine rating with duct firing, and at no less than 80% of the auxiliary boiler rating.. If the applicant demonstrates *to the satisfaction of the District that the* turbine cannot operate at these conditions, then *source testing shall be performed at the highest achievable continuous power* rating.

e. *The following additional operating characteristics shall also be measured or calculated and recorded:*
natural gas flow rate (scfh),
fuel higher heating value (Btu/scf), heat input rate

(MMBtu/hr), exhaust gas flow rate (dscfm), exhaust gas temperature (°F), power *output (gross MW)*, if applicable.

Verification: The project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

AQ-56. *The emissions of any single federal hazardous air pollutant, and the aggregate of all federal hazardous air pollutants, shall not equal or exceed 10 tons or 25 tons, respectively, in any continuous 12 calendar month period. If emissions exceed these limits, the permittee shall apply to amend these limits and conduct a case-by-case Maximum Achievable Control Technology (MACT) analysis in accordance with applicable federal EPA regulations.*

Verification: The project owner shall maintain records of the mass emissions of hazardous air pollutants of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be *available for inspection by representatives of the District, California Air Resources* Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

Emission Offset Conditions

AQ-57. Prior to the initial firing of this equipment, the project owner shall surrender to the District the Class A Emission Reduction Credits (ERCs) or Mobile Emission Reduction Credits (MERCs) specified in the table below. The amount should be equivalent to 120 tons per year of NOx to offset the maximum permitted NOx emissions from this facility.

Project Emission Reduction Credits

Offset source		**NOx**	**VOC**
ERCs	US Foam		30.2
	US Foam	1.3	
	National Offset	4.4	
	Alcoa	1.21	
	Napp Systems		17.05
	Solar Turbines		25
	Designz Unlimited		10.3
	American Fashion	0.7	
	City of San Diego	2.71	
MERCs	San Diego Harbor Excursion: diesel to diesel	29.96	
	Western Maritime: diesel to diesel conversion	8.37	
	WMI: diesel to natural gas engines	35.25	
ERCs: NOx AND VOC		83.90	82.55

Verification: The project owner shall provide copies of theERC or MERC certificates shown in the table to the District and the CPM 30 days prior to the combustion of fuel in the gas turbines.

AQ-58. *Beginning with the start of the ongoing emission reduction monitoring period as defined in "Alternative*

Mobile Source Emission Reduction Program for Replacing Heavy and Medium Heavy Duty Diesel Powered Vehicles and Repowering of Marine Vessels Under Rule 27 (c)(1)(vi)" as approved on September 8, 2000 (herein referred to as the Alternative MERC Program), the owner or operator shall, on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year:

(a) For *each ongoing emission reduction monitoring year, based on the quarterly activity levels submitted by the mobile source owners and the applicable calculation method specified in the Alternative MERC Program, perform a calculation of the annual average and annual aggregate ongoing emission reductions and the ongoing emission reduction deficit, if any, for the MERCs surrendered to offset the facility emissions;*

(b) Provide *an annual report to the District that summarizes the annual average ongoing emission reductions for each MERC, aggregate ongoing emission reductions, and the ongoing emission reduction deficit, if any, and provides supporting calculations and documentation; and*

(*c*) If *the calculated annual ongoing emission reduction deficit is positive, notify the District, provide a compliance schedule to correct the ongoing emission reduction deficit, and correct the ongoing emission reduction deficit in accordance with Subsection (h)(4) of* !he *Alternative MERC Program.*

Verification: *The project owner shall submit an annual MERC report to the District and the CPM on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year.*

AQ-59. *Beginning with the second calendar year following the calendar year that the facility commences operations, the owner or operator shall, on or before March 1 of each calendar year:*

(a) Based *on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment is less than 0.8;*

(b) Based *on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment in primary service is less than 0.8; and*

(*c*) If *one or more MERCs fractional employment or fractional employment in primary service is less than 0.8, provide a compliance schedule to correct any MERC shortfall and correct any MERC shortfall in accordance with Subsection (j)(4) of the Alternative MERC Program.*

Verification: *The project owner shall* submit a report on MERC monitoring to the District and the CPM on or before March 1 of each calendar year.

AQ-60. Deleted

AQ-61. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3 *hour period, excluding hours when the equipment is operated under any startup condition.* Additionally, *the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12 month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine* (Application Nos. 973880 and 973881)

Verification: *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, optimization, replacement and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*

ADDITIONAL GENERAL CONDITIONS

AQ-62. *For each emission limit expressed as pounds per hour or parts per million based on a 1-hour averaging period, compliance shall be based on each 1-clock hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data.*

Verification: *The project owner shall* maintain records of the mass emissions and concentrations of each gas turbine during commissioning, startup/shutdown, and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.

AQ-63*. For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on each continuous 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous monitoring data.*

Verification: *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, startup/shutdown, and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.*
Verification: This project owner provide copies of the annual source test reports to the District for review and written approval, and the CPM within 60 days after the completion of the initial compliance testing.

AQ-64*.* All records required by this Authority to Construct *shall be maintained on site for a minimum of five years and made available to District personnel* upon request. *In addition, quarterly reports of information recorded by these conditions, as specified, shall be sent to the CPM.*

Verification: The project owner shall maintain records of the mass emissions and concentrations of each gas turbine during commissioning, optimization, replacement and operation. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. Quarterly reports shall be sent to the CEC CPM within 60 days after each calendar quarter.

AQ-65. Pursuant to 40 CFR 72.30(b)(2)(ii) of the Federal Acid Rain Program, the applicant shall submit an application for a Title IV Operating Permit at least 24 months prior to the initial startup of this equipment.

Verification: The project owner shall submit an application for a Title IV Operating Permit to the District, and provide a copy of the application to the CPM, at least 24 months prior to the initial startup.

AQ-66. *The applicant shall comply with the continuous emission monitoring requirements of 40 CFR Part 75.*

~~***Verification:*** *The project owner shall maintain records of the mass emissions and concentrations of each gas turbine when operating. These records shall be maintained on site for a minimum of five years and shall be available for inspection by representatives of the District, California Air Resources Board (CARB) and the Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.*~~

~~**AQ-67**. The applicant shall submit an application to the District for a Federal (Title V) Operating Permit, in accordance with District Regulation XIV within 12 months of initial startup of this equipment.~~

~~**Verification:** The project owner shall submit an application for a Title V Operating Permit to the District, and provide a copy of the application to the CPM, within 12 months prior to the initial startup.~~

TABLE 1
BEST AVAILABLE FUGITIVE DUST CONTROL MEASURES

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the CEC CPM. Two soil moisture evaluations must be operations) conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the CEC CPM. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM, Method 1557 or other equivalent method approved by the CEC CPM, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.
Earth-moving: Construction cut areas and mining operations:	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	Apply chemical stabilizers within five working days of grading completion; OR
	Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed	Apply water to at least 80 percent of all inactive disturbed surface areas

surface areas	on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slop or other safety conditions; OR
	Apply dust suppressants in sufficient quantity any frequency to maintain a stabilized surface; OR
	Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.
Unpaved Roads	Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR
	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hours; OR
	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	Apply chemical stabilizers; OR
	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	Install temporary coverings; OR
	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
ALL CATEGORIES	Any other control measures approved by the CEC CPM as equivalent to the methods specified in Table 1 may be used.

TABLE 2
TRACK-OUT CONTROL OPTIONS

(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the CEC CPM as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTROL MEASURES FOR WIND CONDITIONS EXCEEDING 25 MPH

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	Cease all active operations; OR
	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
	Apply chemical stabilizers prior to wind event; OR
	Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR
	Take the actions specified in Table 1, Item (3c); OR
	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	Apply chemical stabilizers prior to wind event; OR
	Apply water twice [once] per hour during active operation; OR
	Stop all vehicular traffic.
Open storage piles	Apply water twice [once] per hours; OR
	Install temporary coverings.
Paved road track-out	Cover all haul vehicles; OR
	Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

ATTACHMENT 4

Attachment 4 - Air Quality Conditions of Certification Comparison

Old Air Quality Conditions	New Air Quality Conditions	Justification
AQ-1	AQ-1	No change
AQ-2	AQ-2	No change
AQ-3	AQ-6	To match PTO
AQ-4	AQ-46	To match PTO
AQ-5	Deleted	Not in construction
AQ-6	AQ-52	Moved to end of permit
AQ-7	AQ-53	Moved to end of permit
AQ-8	AQ-48	Moved to end of permit
AQ-9	Deleted	Not in construction
AQ-10	Deleted	Not in construction
AQ-11	Deleted	Not in construction
AQ-12	AQ-54	Moved to end of permit
AQ-13	AQ-55	Moved to end of permit
AQ-14	AQ-34	To match PTO
AQ-15	Deleted	Not in construction
AQ-16	AQ-9	To match PTO
AQ-17	AQ-10	To match PTO
AQ-18	AQ-37	To match PTO
AQ-19	Deleted	No more aux boiler
AQ-20	AQ-56	Moved to end of permit
AQ-21	AQ-23	To match PTO
AQ-22	Deleted	Commissioning period is completed
AQ-23	Deleted	Not in PTO
AQ-24	Deleted	Not in PTO
AQ-25	Deleted	Commissioning period is completed
AQ-26	Deleted	Commissioning period is completed
AQ-27	Deleted	Commissioning period is completed
AQ-28	AQ-46	Moved to end of permit
AQ-29	AQ-36	To match PTO
AQ-30	AQ-19	To match PTO
AQ-31	AQ-11	To match PTO

Attachment 4 - Air Quality Conditions of Certification Comparison

Old Air Quality Conditions	New Air Quality Conditions	Justification
AQ-32	AQ-14	To match PTO
AQ-33	AQ-15	To match PTO
AQ-34	AQ-16	To match PTO
AQ-35	AQ-17	To match PTO
AQ-36	AQ-20	To match PTO
AQ-37	AQ-21	To match PTO
AQ-38	AQ-22	To match PTO
AQ-39	AQ-23	To match PTO
AQ-40	AQ-25	To match PTO
AQ-41	AQ-26	To match PTO
AQ-42	AQ-49	To match PTO
AQ-43	AQ-18	To match PTO
AQ-44	Deleted	No more aux boiler
AQ-45	Deleted	No more aux boiler
AQ-46	Deleted	No more aux boiler
AQ-47	Deleted	No more aux boiler
AQ-48	Deleted	No more aux boiler
AQ-49	Deleted	No more aux boiler
AQ-50	Deleted	No more aux boiler
AQ-51	Deleted	No more aux boiler
AQ-52	AQ-57	Moved to end of permit
AQ-53	Deleted	Commissioning period is completed
AQ-54	Deleted	Commissioning period is completed
AQ-55	AQ-39	To match PTO
AQ-56	AQ-5	To match PTO
AQ-57	Deleted	No longer applicable
AQ-58	AQ-42	To match PTO
AQ-59	AQ-43	To match PTO
AQ-60	Deleted	Condition was deleted in prior CEC Amendment
AQ-61	AQ-44	To match PTO
AQ-62	AQ-28	To match PTO

Attachment 4 - Air Quality Conditions of Certification Comparison

Old Air Quality Conditions	New Air Quality Conditions	Justification
AQ-63	AQ-51	Moved to end of permit
AQ-64	AQ-38	To match PTO
AQ-65	Deleted	No longer applicable, Title IV application already submitted
AQ-66	AQ-50	Moved to end of permit
AQ-67	Deleted	No longer applicable, Title V application already submitted

ATTACHMENT 5

COUNTY OF SAN DIEGO, AIR POLLUTION CONTROL DISTRICT
10124 OLD GROVE ROAD, SAN DIEGO, CA 92131
PHONE (858) 586-2600 FAX (858) 586-2601
www.sdapcd.org

Sectors: 5, R
Site ID: APCD1999-SITE-10882
App ID: APCD2012-APP-002154

PERMIT ID
APCD2011-PTO-000948
APCD2011-PTO-000948

Otay Mesa Energy Center LLC
Shubhi Love
606 De La Fuente Ct
San Diego CA, 92154

EQUIPMENT ADDRESS
Otay Mesa Energy Center LLC
Shubhi Love
606 De La Fuente Ct
San Diego CA 92154

PERMIT TO OPERATE

EXPIRES: September 30, 2014

This permit is not valid until required fees have been paid.

The above is hereby granted a Permit To Operate the article, machine, equipment or contrivance described below. This permit is not transferable to a new owner nor is it valid for operation of the equipment at another location except as specified. This Permit To Operate or copy must be posted on or within 25 feet of the equipment, or readily available on the operating premises.

EQUIPMENT DESCRIPTION

Power Station #2 consisting of: one Gas Turbine (171.7 MW nominal): General Electric, Model 7FA, S/N 298094, with DLN 2.6 low-NOx burners, natural gas fired, 1767.8 MMBtu/hr nominal heat input (HHV), with a heat recovery steam generator (HRSG) with a 388.1 MMBtu/hr duct burner, Nooter-Eriksen, vented to a selective catalytic reduction (SCR) system, equipped with a continuous emission monitoring system (CEMS); common to both power stations are a steam turbine generator (277 MW nominal), Siemans-Westinghouse, Model KN; two air-cooled condensers, GEA, 295'L x 123'W x 76'H; a wet surface air cooler, Niagara Blower Co., Model RWC 48240-2F16; equipped with GE OpFlex control system software.

Every person who owns or operates this equipment is required to comply with the conditions listed below and all applicable requirements and District rules, including but not limited to Rules 10, 20, 40, 50, 51.

Fee Schedules: 1 [92R] VOC Lab Analysis (T&M)
1 [92F] NOx and CO Source Test
1 [92A] Particulate Matter Source Test
1 [20F] Non- Aircraft Turbine Engine
1 [92I] Ammonia Source Test

BEC: APCD2011-CON-000277

FAILURE TO OPERATE IN COMPLIANCE IS A MISDEMEANOR SUBJECT TO CIVIL AND CRIMINAL PENALTIES

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be properly maintained and kept in good operating condition at all times.
3. The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The permittee shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request. [Rule 62; 40 CFR 60 Subpart GG]
4. The permittee shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO2 allowances. (40 CFR Part 73)

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5. The emissions of any single federal hazardous air pollutant (HAP) shall not equal or exceed 10 tons, and the aggregate of all federal HAPs, shall not equal or exceed 25 tons in any rolling 12 calendar month period. Compliance with the HAP limits shall be based on a surrogate VOC/HAP correlation factor determined during initial source testing If emissions exceed these limits, the permittee shall apply to amend this permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR 63. [40 CFR 63]
6. Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.
7. This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.
8. The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)
9. The total aggregate annual emissions from all emission units at the stationary source shall not exceed 100 tons of oxides of nitrogen (NOx), calculated as nitrogen dioxide, and shall not exceed 316 tons of carbon monoxide (CO) for each consecutive 12-calendar month period. The NOx and CO emissions shall begin accruing at the initial firing of each turbine. Compliance with this limit shall be verified using the CEMS system on each gas turbine as well as EPA- or ARB-certified NOx emissions factors, testing results, or other representative emissions information for all other combustion equipment. [Rule 20.3]
10. The total aggregate emissions of volatile organic compounds (VOC) from all emission units at the stationary source shall not exceed 47.5 tons for each consecutive 12-calendar month period. The VOC emissions shall begin accruing at the initial firing of each piece of equipment. Compliance shall be verified using testing results, EPA- or ARB-certified VOC emissions factors, and/or other representative emissions information for all other combustion equipment. [Rule 20.3]
11. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 1-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified through annual source testing. This limit shall not apply to the first fifteen 1-hour average NOx emissions measurements above 2.0 ppmvd corrected to 15% oxygen in any rolling 12-month period for each gas turbine provided the following requirements are met:
    a. this equipment operates under any one of the following:
    i) Rapid combustion turbine load changes due to the following conditions:
    A) Load changes initiated by the California Independent Systems Operator (ISO) or a successor entity when the plant is operating under Automatic Generation Control; or
    B) Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load
    ii) The first two 1-hour reporting periods following the initiation or shutdown of a system injection pump
    iii) The first two 1-hour reporting periods following the initiation of HRSG duct burners
    iv) Events as the result of technological limitation identified by the operator and approved in writing by the District.
    b. the 1-hour average NOx emissions above 2.0 ppmvd corrected to 15% oxygen did not occur as a result of operator neglect, improper operation or maintenance, and is a qualified breakdown under District Rule 98.
    c. the qualified operating conditions described in (a) above are recorded in the plant's operating log within 24 hours of the event. The notations in the log shall describe the data and time of entry into the log and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmvd 1-hour average limit.
    d. the 1-hour average NOx concentration for periods that result from a qualified operating condition described in (a) above does not exceed 25 ppmvd corrected to 15% oxygen.
    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 to Operate. [Rule 20.3]

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12. The emissions of oxides of nitrogen (NOx) from each turbine, calculated as nitrogen dioxide, shall not exceed 110 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. This limit shall apply at all times, including periods of startup and shutdown. Compliance with this limit shall be based on CEMS data for each unit as averaged in accordance with 40 CFR 60 Subpart GG Subsection 60.334. [40 CFR 60 Subpart GG]
13. Excess emissions, as defined in 40 CFR 60 Subpart GG Subsection 60.334, shall be reported pursuant for all periods of unit operation, including startup, shutdown, and malfunction in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be postmarked by the 30th day following the end of each calendar 6-month period unless more frequent reporting is required in accordance with 40 CFR 60 Subpart A Subsection 60.7(c). These reports shall be submitted to the District's Compliance Division. [40 CFR 60 Subpart GG]
14. The emissions of carbon monoxide (CO) from each turbine shall not exceed 6.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with these limits shall be based on CEMS data for each unit and averaged over each continuous 3-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified annual source testing. [Rule 20.3]
15. The emissions of volatile organic compounds (VOC) from each turbine, calculated as methane, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CO CEMS data for each unit, averaged over each 1-hour period, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation, and the District approved CO/VOC surrogate relationship. The CO/VOC surrogate relationship shall be verified and/or modified, if necessary, based on annual source testing. [Rule 20.3]
16. When operated with the duct burner at or below 38.8 MMBtu/hr heat input, the emissions from each turbine shall not exceed the following emission limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a continuous 3-hour averaging period and compliance with the VOC limit shall be based on a 1-hour averaging period.

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	13.14
Carbon Monoxide, CO	24.0
Volatile Organic Compounds, VOC	4.58

[Rule 20.3]

17. When operated with the duct burner above 38.8 MMBtu/hr heat input, the emissions from this equipment shall not exceed the following emission limits, except during startup or shutdown conditions, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and/or District approved emission source testing. Compliance with the NOx and CO limits shall be based on a continuous 3-hour averaging period and compliance with the VOC limit shall be based on a 1-hour averaging period.

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	15.95
Carbon Monoxide, CO	29.13
Volatile Organic Compounds, VOC	5.56

[Rule 20.3]

18. The emissions of particulate matter less than 10 microns (PM10) from each turbine shall not exceed 9.0 lbs/hr when operated with the duct burner at or below 38.8 MMBtu/hr heat input and shall not exceed 11.5 lbs/hr from each turbine when operated with the duct burner above 38.8 MMBtu/hr. Compliance with this limit shall be based on annual source testing (only with the duct burner operating in accordance with Condition 37). [Rule 20.3]

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19. Except during startups and shutdowns, the emissions of ammonia (slippage) from each gas turbine exhaust stack shall not exceed 10.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen and averaged over a 1-hour period. Compliance with this limit shall be based on a District approved calculation methodology and verified during annual source testing. [Rule 1200]

20. Fuel consumption by the duct burners for both turbines shall not exceed 3,881,000 MMBtu (HHV) per rolling 12-month period. Whenever the duct burners are in operation, the CEMS shall record the dates and fuel consumption for each duct burner. The CEMS shall also record the total duct burner fuel usage for each rolling 12-month period (in MMBtu). The applicant shall maintain a log that contains, at a minimum, the dates and fuel usage when one or both turbines are operated with duct firing. These records shall be maintained on site for a minimum of five years and made available to District personnel upon request. [Rule 20.3]

21. When operated under startup conditions, the emissions from each turbine shall not exceed the following emission limits, averaged over each 1-hour period, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors and/or District approved emission source testing:

Pollutant	Emission Limit, lbs/hr
Oxides of Nitrogen, NOx (calculated as NO2)	240.0
Carbon Monoxide, CO	2706
Volatile Organic Compounds, VOC	48.0

[Rule 20.3]

22. When operated under startup or shutdown conditions, the emissions from each turbine shall not exceed the following emission limits, totaled per event, as determined by the Continuous Emissions Monitoring System (CEMS), the District approved CO/VOC surrogate relationship, and continuous monitors and/or District approved emission source testing:

Pollutant (during startups)	Emission Limit, lbs/ event
Oxides of Nitrogen, NOx (calculated as NO2)	480
Carbon Monoxide, CO	5412
Volatile Organic Compounds, VOC	96

Pollutant (during shutdowns)	Emission Limit, lbs/ event
Oxides of Nitrogen, NOx (calculated as NO2)	80
Carbon Monoxide, CO	902
Volatile Organic Compounds, VOC	16

[Rule 20.3]

23. Startup for each gas turbine shall be defined as the period beginning with the introduction of fuel to the combustion turbine following a non-operational period and ending after the lesser of either 360 minutes of continuous of fuel flow or when the CEMS records ten consecutive one-minute data points in compliance with the emission concentration limits of Conditions 11, 14, and 19 for the gas turbine. Excluding extended startups and the first 120 minutes of all other startups, the gas turbines shall comply with a NOx emission concentration limit of 11.8 ppmvd corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period. For the purposes of this Permit to Operate, an extended startup shall be defined as the time during any startup when the steam turbine inner casing temperature is less than or equal to 500 °F. [Rules 20.3, 69.3.1]

24. During startups, including extended startups as defined in Condition 23, excluding the first 120 minutes of the startup, NOx emissions from the gas turbine shall not exceed 42 ppm corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data averaged over each one-hour period. [Rule 69.3]

25. Shutdown for each gas turbine shall be defined as the 60-minute period preceding the termination of fuel flow to the gas turbine. [Rules 20.3, 69.3.1]

26. Both gas turbines shall not be operated simultaneously in startup mode. [Rule 20.3]

27. For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein. [40 CFR 75]

Sectors: 5, R
Site ID: APCD1999-SITE-10882
App ID: APCD2012-APP-002154

PERMIT ID
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28. For each emission limit expressed as pounds per hour or parts per million based on a 1-hour averaging period, compliance shall be based on each 1-clock hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data. A valid clock hour shall be defined as one that includes at least 16 minutes of valid 1-minute data or includes a data point from at least two different quadrants that are spaced at least 15 minutes apart. A duct burner clock hour shall be defined as a valid clock hour in which the duct burner heat input exceeds 38.8 MMBtu/hr. [40 CFR 75]
29. For each emission limit expressed as pounds per hour or parts per million based on a 3-hour averaging period, compliance shall be based on rolling 3-clock hour period, not including startup and shutdown periods, using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data. [40 CFR 75]
30. The Oxides of Nitrogen (NOx) and Oxygen (O2) CEMs shall be certified and maintained in accordance with applicable Federal Regulations including the requirements of: -Sections 75.10 and 75.12 of Title 40 -Code of Federal Regulations Part 75 (40 CFR 75) -the performance specifications of Appendix A of 40 CFR 75 -the quality assurance procedures of Appendix B of 40 CFR 75 -the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMS shall be certified and maintained in accordance with 40 CFR 60. (40 CFR Part 75, 40 CFR Part 60), and a CEMS protocol approved by the District, unless otherwise specified in this permit. [40 CFR 60; 40 CFR 75]
31. When the CEMS is not recording data and the unit is operating, hourly NOx emissions shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMS during the most recent hours in which the unit operated 3 continuous hours at no less than 80% of full power rating of each power station, either with or without duct firing. [40 CFR 60; 40 CFR 75]
32. Any violation of any emission standard as indicated by the CEMS shall be reported to the District's Compliance Division within 96 hours after such occurrence. [40 CFR 75]
33. The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 Sections (D), (E), (F)(2), (F)(3), (F)(4) and (F)(5) and CEMs Protocol approved by the District. [Rule 19.2]
34. The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS. [40 CFR 75]
35. Operating logs or Data Acquisition System (DAS) records shall be maintained to record the following:
    a. dates of all startups and shutdowns;
    b. beginning and end times, to the nearest minute, of all startups and shutdowns;
    c. fuel usage, in standard cubic feet, for each clock hour, calendar month, and 12-calendar month period;
    d. hours of daily operation; and
    e. total cumulative hours per calendar year.
    [Rules 20.3, 69.3.1]
36. Continuous monitors shall be installed on each turbine to monitor or calculate and record the following:
    a. gas turbine natural gas flow rate (scfh),
    b. duct burner natural gas flow rate (scfh),
    c. gas turbine heat input rate (MMBtu/hr), HHV,
    d. duct burner heat input rate (MMBtu/hr), HHV,
    e. ammonia stack concentration (ppmvd, corrected to 15% oxygen),
    f. ammonia injection rate (lbs/hr),
    g. steam turbine inner casing temperature (ºF),
    h. SCR inlet temperature (°F),
    i. exhaust gas temperature (°F), and
    j. power output (gross MW).
    The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. The monitors shall be in full operation at all times when the turbine is in operation. [Rule 69.3.1]

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37. The applicant shall maintain records, at least on a calendar monthly basis, of total aggregate mass emissions of NOx, CO and VOC, in tons per year, from all emission units, at this stationary source for the previous 12-calendar month period. These records shall be made available for inspection within 30 calendar days after the end of each calendar month. [Rule 20.3]

38. All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request. [Rules 20.3, 69.3.1, 1421(b)]

39. This equipment shall be source tested once each permit year (annual source test) to demonstrate compliance with the emission standards specified in Conditions 11, 14, 15, 17, 18, and 19 of this permit. For the purposes of this permit, a permit year is the 12-month period ending on the last day of the permit expiration month. It is the responsibility of the permittee to schedule the source test with the District. The source test shall be performed or witnessed by the District. Each annual source test shall be separated by at least 90 days from any annual source test performed in a different permit year. If this testing will be performed by someone other than the District, a source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the following requirements:
a. Measurements of oxides of nitrogen (NOx), carbon monoxide (CO), and stack gas oxygen content (O2) shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) Methods 7E, 10 and 3A, respectively, and the San Diego Air Pollution Control District Method 100, or alternative methods approved by the District and the EPA.
b. Measurements of particulate matter less than 10 microns shall be conducted in accordance with the U.S. Environmental Protection Agency (EPA) Methods 201A and 202, or alternative methods approved by the District and the EPA.
c. Measurements of volatile organic compounds (VOC) shall be conducted in accordance with San Diego Air Pollution Control District Methods 18 and/or 25A, or alternative methods approved by the District and the EPA.
d. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District (BAAQMD) Method ST-1B, or alternative methods approved by the District and the EPA.
e. Source testing shall be performed only with both the combustion turbine and duct burner in operation. The duct burner shall be operated at not less than 80% of the rated heat input unless it is demonstrated to the satisfaction of the District that the unit cannot operate under these conditions. If the demonstration is accepted, then the emissions source testing shall be performed at the highest achievable continuous heat input.
f. Source testing shall be performed at not less than 80% of the unit's rated load unless it is demonstrated to the satisfaction of the District that the unit cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous power level.
g. The following additional operating characteristics shall also be measured or calculated and recorded:
gas turbine natural gas flow rate (scfh),
duct burner natural gas flow rate (scfh),
fuel higher heating value (Btu/scf),
gas turbine heat input rate (MMBtu/hr),
duct burner heat input rate (MMBtu/hr),
ammonia injection rate (lbs/hr),
SCR inlet temperature (°F),
exhaust gas temperature (°F),
power output (gross MW).

[Rules 20.3, 69.3.1; 40 CFR 60 Subpart GG]

40. A Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the permittee shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present. [40 CFR 75]

41. Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval. [40 CFR 75]

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42. Beginning with the start of the ongoing emission reduction monitoring period as defined in "Alternative Mobile Source Emission Reduction Program for Replacing Heavy and Medium Heavy-Duty Diesel Powered Vehicles and Repowering of Marine Vessels Under Rule 27 (c)(1)(vi)" as approved on September 8, 2000 (herein referred to as the Alternative MERC Program), the owner or operator shall, on or before the last day of the second calendar month following the end of each ongoing emission reduction monitoring year:
a. for each ongoing emission reduction monitoring year, based on the quarterly activity levels submitted by the mobile source owners and the applicable calculation method specified in the Alternative MERC Program, perform a calculation of the annual average and annual aggregate ongoing emission reductions and the ongoing emission reduction deficit, if any, for the MERCs surrendered to offset the facility's emissions;
b. provide an annual report to the District that summarizes the annual average ongoing emission reductions for each MERC, aggregate ongoing emission reductions, and the ongoing emission reduction deficit, if any, and provides supporting calculations and documentation; and
c. if the calculated annual ongoing emission reduction deficit is positive, notify the District, provide a compliance schedule to correct the ongoing emission reduction deficit, and correct the ongoing emission reduction deficit in accordance with Subsection (h)(4) of the Alternative MERC Program. [Rule 27.1]

43. Beginning with the second calendar year following the calendar year that the facility commences operations, the owner or operator shall, on or before March 1 of each calendar year:
a. based on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment is less than 0.8;
b. based on information supplied by the mobile source owners for each MERC surrendered to the District, notify the District if the MERC fractional employment in primary service is less than 0.8; and
c. if one or more MERCs fractional employment or fractional employment in primary service is less than 0.8, provide a compliance schedule to correct any MERC shortfall and correct any MERC shortfall in accordance with Subsection (j)(4) of the Alternative MERC Program.
[Rule 27.1]

44. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, additional Class A emission reduction credits equivalent to the expiring MERC shall be surrendered to the District to offset project emissions unless project emissions are reduced such that the emissions of oxides of nitrogen (NOx) shall not exceed 1.0 parts per million by volume on a dry basis (ppmvd) corrected to 15% oxygen. Compliance with this limit shall be based on CEMS data for each unit and averaged over each 3-hour period, excluding hours when the equipment is operated under any startup condition. If the project NOx emissions limit is reduced to 1.0 ppm, the total annual emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, shall not exceed 50 tons per rolling 12-month period. Compliance with this limit shall be verified using the CEMS system on each gas turbine. [Rule 27.1]