CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

DOCKET
99-AFC-5C
DATE APR 09 2009
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DATE: April 9, 2009

TO: Interested Parties

FROM: Donna Stone, Compliance Project Manager

SUBJECT: Otay Mesa Energy Center Project (99-AFC-5C)
Staff analysis of proposed Air Quality Amendment

On May 12, 2008, Otay Mesa Energy Center, LLC filed a petition with the California Energy Commission to amend the Energy Commission Decision for the Otay Mesa Energy Center Project. The Otay Mesa Energy Center project is a 510 MW natural gas-fired combined cycle power plant located in San Diego County. The project was certified by the Energy Commission on April 28, 2001, and is currently under construction. The facility's owner at the time, Calpine Corporation, began construction grading in September 2001. The project had several stops to construction with the most recent restart in May 2007, with construction steady since that date. As of the end of March 2009, the project was 85 percent constructed with the start of commercial operation expected to be October 1, 2009. The current owner is Otay Mesa Energy Center, LLC.

The proposed amendment condition changes will clarify the Otay Mesa Energy Center project's compliance with air quality conditions will be based on clock hour averaging periods. **AQ-61** is being revised to clarify the expiration date of the Mobil Emission Reduction Credits (MERCs) and the requirement to reduce emissions from 2.0 parts per million (PPM) nitrogen oxides (NOx) to1.0 ppm NOx after twenty years of operation. The District has proposed to now allow the project owner to either surrender Class A ERCs as MERCs expire, or reduce emissions to 1.0 ppm NOx. **AQ-60**, describing potential refunds of unused ERCs or MERCs, is being deleted because the United States Environmental Protection Agency indicates such refunds are not valid (District 2009b).

Energy Commission staff reviewed the petition and assessed the impacts of this proposal on environmental quality, public health and safety, and proposes revisions to existing conditions of certification for **AQ-22 to -24**, **-30 to -35**, and **-60 to 63**. Staff also recommends renumbering all the air quality conditions of certification, as shown in Air Quality Table 1, and reissuing the conditions with the proposed numbering. With the implementation of revised conditions, the project will remain in compliance with applicable laws, ordinances, regulations, and standards and the proposed condition changes will not result in a significant adverse direct or cumulative impact to the environment (Title 20, California Code of Regulations, Section 1769). A copy of this analysis is attached to this notice.

The amendment petition and staff's analysis have been posted on the Energy Commission's webpage at www.energy.ca.gov/sitingcases. The Energy Commission's Order (if approved) will also be posted on the webpage. Energy Commission staff will recommend approval of the petition at the June 3, 2009**,** Business Meeting of the

Energy Commission. If you have comments on this proposed modification, please submit them to me at the address below prior to May 11, 2009.

Donna Stone**,** Compliance Project Manager
California Energy Commission
1516 9th Street, MS-2000
Sacramento, CA 95814

Comments may be submitted by fax to (916) 654-3882, or by e-mail to dstone@energy.state.ca.us. If you have any questions, please contact me at (916) 654-4745.

Enclosure

OTAY MESA ENERGY CENTER (99-AFC-5C)

Request to Amend Various Project Air Quality Conditions of Certification

Matthew Layton, P.E.

INTRODUCTION

On May 12, 2008, Calpine (Calpine) and the Otay Mesa Energy Center, LLC filed a petition (Otay 2008) to amend several project air quality conditions of certification for the Otay Mesa Energy Center (99-AFC-05C). Most significantly, Calpine proposed permit modifications that would address the expiration date of project mobile emission reduction credits (MERCs), based on recommendations of the San Diego Air Pollution Control District (District). The other condition changes are administrative. Calpine filed the proposed changes with the District.

BACKGROUND

In August 1999, PG&E Generating proposed to construct and operate a 500 megawatt (MW) combined cycle project in Otay Mesa, California. The Otay Mesa Energy Center Project was certified in April 2001 (CEC 2001).The project sale to Calpine was approved in October 2001. Several amendments have been approved that modified the project and the conditions of certification. The project design includes two General Electric (GE) 7FA combustion turbine generators (CTG), a steam turbine generator, a dry cooling tower, and ancillary equipment. Project construction, started well after the 2001 certification, is nearing completion. The fuel will be natural gas.

LAWS, ORDINANCES, REGULATION, AND STANDARDS (LORS) - COMPLIANCE

The project, as amended, would be subject to all the LORS described in the Final Staff Assessment (FSA) (CEC 2000). On February 20, 2009, staff received a copy of the District's engineering evaluation and revised Final Determination of Compliance (FDOC) (District 2009a) for the project. This document includes a set of Air Quality conditions that are revised to address this amendment and that ensures continuous compliance during construction and operation of the facility. Staff has incorporated the revised District conditions into this staff amendment analysis. Due to several other revisions to the project and to the conditions of certification since certification in 2001, the numbering between the Energy Commission and the District conditions are confusing and inconsistent. Staff is renumbering and reissuing all the conditions of certification to ensure consistency in the numbering, and to highlight those few conditions changed by this proposed amendment.

SETTING

The project setting has not changed significantly from the original Final Staff Assessment (FSA) (CEC 2000).

ANALYSIS OF SPECIFIC AMENDMENT REQUESTS

The project owner is requesting deletion of the word *rolling, rolling continuous* or *continuous* from conditions of certification **AQ-22** to -**24, -30** to **-35, -37**, and **-62 to -63**. The changes are proposed to clarify that compliance shall be based on clock hour averaging periods. Staff agrees with the proposed changes.

AQ-61 is being revised to clarify the expiration date of the Mobile Emission Reduction Credits (MERCs) and the project requirement to reduce emissions from 2.0 parts per million (ppm) nitrogen oxides (NOx) to 1.0 ppm NOx after twenty years of operation. In the initial project certification, it was assumed that the 20-year end of life of the MERC would coincide with 20 years of operation of the project. At that time, the applicant would lower emissions from 2.0 ppm NOx to 1.0 ppm NOx. However, the project has been significantly delayed, resulting in the MERCs (which were created when the project was licensed) expiring long before the project would operate 20 years. The District has proposed to now allow the project owner to either surrender Class A emission reduction credits as MERCs expire, or reduce emissions to 1.0 ppm NOx.

The District has provided more relief from the absolute requirement that the project meet the 1.0 parts per million (ppm) limit in that this limit was contingent on the 1999 proposal to use SCONOx® for NOx control. In a previous project amendment, the District and staff agreed that SCONOx® was not compatible with the project, and therefore not available to the project to pursue lowering emissions to 1.0 ppm NOx. With the surrender of additional ERCs as MERCs retire, project emissions and impacts will not change. Staff agrees with the proposed changes.

AQ-60, describing potential refunds of unused ERCs or MERCs, is being deleted because the United States Environmental Protection Agency indicates such refunds are not valid (District 2009b).

CONCLUSIONS AND RECOMMENDATIONS

The project would comply with applicable District Rules and Regulations, including New Source Review requirements, as demonstrated by the revised District FDOC. Staff recommends approval of the proposed changes to conditions of certification **AQ-22** to -**24, -30** to **-35, -37**, and **-60 to -63**. Staff also recommends renumbering all the conditions of certification, as shown in Air Quality Table 1, and reissuing the conditions with the proposed numbering.

AMENDED AND PROPOSED CONDITIONS OF CERTIFICATION

Below is Air Quality Table 1 that cross references the numbering of the project Air Quality Conditions of Certification (COC). Staff air quality conditions are show as **AQ-SC1** through **AQ-SC10**, and include construction fugitive dust control measures shown in Tables 1 through 3 that immediately follow **AQ-SC10**. The District issued an amended FDOC and the FDOC's conditions are included (Air Quality Conditions of

Certification **AQ-1** through **AQ-67**). Conditions that are proposed to be amended are shown in bold in Air Quality Table 1. Staff proposes renumbering the other conditions in Air Quality Table 1, but they are otherwise unchanged by this amendment. Changes to individual conditions are shown in the full set of conditions that follow Air Quality Table 1. Strikeout is used to indicate deleted language and **underline and bold** for new language.

Air Quality Table 1
Revisions to Otay Mesa Conditions of Certification

Proposed COC Number	FDOC District Condition	Decision or Amendment COC Number	Description
AQ-SC1	---	AQ-70	CEC CPM approved fugitive Dust Control Plan
AQ-SC2	---	AQ-71	Construction phase compliance
AQ-SC3	---	AQ-72	Visible fugitive dust
AQ-SC4	---	AQ-73	Construction Equipment Plan
AQ-SC5	---	AQ-74	Oxidizing soot filters on construction equipment
AQ-SC6	---	AQ-75	PM10 mitigation fee
AQ-SC7	---	AQ-76	PM10, VOC and SOX emission reductions that occur coincident with NOx MERCs
AQ-SC8	---	AQ-77	WSAC PM10 limit
AQ-SC9	---	AQ-78	WSAC circulating water
AQ-SC10	---	AQ-79	Submit any changes to air permit
Tables 1, 2, 3	---	---	Construction fugitive dust control tables
AQ-1	1	AQ-1	General condition
AQ-2	2	AQ-2	General condition
AQ-3	3	AQ-3	General condition
AQ-4	4	AQ-4	General condition
AQ-5	5	AQ-5	Submit project design
AQ-6	6	AQ-6	Stack height
AQ-7	7	AQ-7	Stack test ports
AQ-8	8	AQ-8	Natural gas fuel specification
AQ-9	9	AQ-10	CEMS installation prior to first fire
AQ-10	10	AQ-11	Permanent CEMS installation
AQ-11	11	AQ-12	CO/VOC surrogate relationship
AQ-12	12	AQ-13	Performance measurements
AQ-13	13	AQ-14	CEMS certifications
AQ-14	14	AQ-15	Notification of Modification of CEMS
AQ-15	15	AQ-16	RATA tests
AQ-16	16	AQ-17	Total NOx limit
AQ-17	17	AQ-80	Total VOC limit
AQ-18	18	AQ-18	Recording of mass emissions
AQ-19	19	AQ-81	Auxiliary boiler Rule 69.2 compliance
AQ-20	20	AQ-19	Gas turbine Rule 69.3.1 without post-combustion controls
AQ-21	21	AQ-20	Gas turbine Rule 69.3.1 with post-combustion controls
AQ-22	**22**	**AQ-21**	**Maximum gas turbine hourly NOx limit**
AQ-23	**23**	**AQ-22**	**Gas turbine hourly NOx limit w/post-comb controls**
AQ-24	**24**	**AQ-23**	**Gas turbines hourly CO limit**
AQ-25	25	AQ-24	Gas turbines commissioning
AQ-26	26	AQ-25	Extension of requirement to install post-comb equipment
AQ-27	27	AQ-26	Commissioning report
AQ-28	28	AQ-35	On-going operations

Proposed COC Number	FDOC District Condition	Decision or Amendment COC Number	Description
AQ-29	29	AQ-82	Ammonia CEM
AQ-30	**30**	**AQ-83**	**Ammonia slip**
AQ-31	**31**	**AQ-36**	**NOx concentration limit and excursion language**
AQ-32	**32**	**AQ-37**	**CO concentration limit**
AQ-33	**33**	**AQ-38**	**VOC concentration limit**
AQ-34	**34**	**AQ-39**	**Mass emission limits**
AQ-35	**35**	**AQ-40**	**Duct firing mass emission limits**
AQ-36	36	AQ-41	Fuel firing limit
AQ-37	**37**	**AQ-42**	**Startup hourly mass emission limits**
AQ-38	38	AQ-43	Startup/shutdown event mass emission limits
AQ-39	39	AQ-44	Definition of startup
AQ-40	40	AQ-45	Definition of shutdown
AQ-41	41	AQ-46	Limit on simultaneous startups
AQ-42	42	AQ-47	Log of startups and shutdowns
AQ-43	43	AQ-48	PM10 limit
AQ-44	44	AQ-84	Auxiliary boiler fuel limit
AQ-45	45	AQ-85	Auxiliary boiler final design
AQ-46	46	AQ-86	Auxiliary boiler NOx limit
AQ-47	47	AQ-87	Auxiliary boiler CO limit
AQ-48	48	AQ-88	Auxiliary boiler VOC limit
AQ-49	49	AQ-89	Definition of auxiliary boiler startup
AQ-50	50	AQ-90	Definition of auxiliary boiler shutdown
AQ-51	51	AQ-49	Initial source test
AQ-52	52	AQ-50	Initial HAP source test
AQ-53	53	AQ-51	Final source test report
AQ-54	54	AQ-52	Final HAP source test report
AQ-55	55	AQ-53	Annual source test
AQ-56	56	AQ-54	HAP annual limits
AQ-57	57	AQ-55	Class A NOx emission reduction credits
AQ-58	58	AQ-56	MERC
AQ-59	59	AQ-57	MERC status
~~**AQ-60**~~	~~**60**~~	~~**AQ-58**~~	**DELETED ~~Refund of ERCs or MERCs~~**
AQ-61	**61**	**AQ-59**	**Expiration of MERCs**
AQ-62	**62**	**AQ-60**	**General condition**
AQ-63	**63**	**AQ-61**	**General condition**
AQ-64	64	AQ-62	General condition
AQ-65	65	AQ-63	Title IV
AQ-66	66	AQ-64	General condition
AQ-67	67	AQ-65	Title V

Bolded conditions above have revised language pursuant to changes in this amendment. Otherwise, the conditions are being renumbered and reissued here to ease future compliance.

CONDITIONS OF CERTIFICATION

ENERGY COMMISSION STAFF CONDITIONS

Staff conditions (**AQ-SC1** through **AQ-SC10**) were not included in the District's Determination of Compliance.

The following definitions apply to the staff conditions:

(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 filter 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.

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.

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 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 slope or other safety conditions; OR
	Apply dust suppressants in sufficient quantity and 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 hour; 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 extends, 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 hour; 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.

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.

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

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 provide copies of the design details of the gas turbines and associated equipment to be installed, including all proposed post-

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

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

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 scf of natural gas) and higher heating value (Btu/scf) 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-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 (O_2) 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 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 gas turbines, 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 observers may 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, 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-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 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 ~~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-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 ~~rolling continuous~~ 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 ~~rolling continuous~~ 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 10.0 parts 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 Commission. The information gathered in this condition shall be included in the quarterly reports required in Condition AQ-64.

AQ-31. 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 continuous~~ 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 an initial source test and 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. 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, or 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, and in the CEMS by 5:00 pm 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 1-hour average NOx concentration for periods that result from a qualified operating condition does no 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 FDOC.

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.

AQ-32. 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. 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-33. 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. 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. When operated without duct firing, the emissions from each turbine shall not exceed the following emission limits, except during startup conditions, as determined by the Continuous Emissions Monitoring System (CEMS) 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)	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 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.

AQ-35. When operated with duct firing, 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.

AQ-36. 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, 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.

AQ-37. When operated under startup conditions, the emissions from each turbine shall not exceed the following emission limits, averaged over each ~~rolling continuous~~ 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. 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-64.

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-64.

AQ-40. 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 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.

AQ-41. Both gas turbines shall not be operated simultaneously in startup mode. Additionally, the auxiliary boiler shall not 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 and 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-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.

Verification: The project owner shall maintain records of all startups and shutdown of each gas turbine and 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-43. The emissions of particulate matter less than 10 microns (PM_{10}) 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.

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-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-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-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.

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-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-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.

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.

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.

AQ-51. Within 30 days after completion of the Commissioning Period, an initial emissions 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 compliance with all applicable emission limits. 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: 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-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 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,) (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.

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: 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-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: 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-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 the ERC 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'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-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 ~~The permittee may apply for the refund of any unneeded ERCs or MERCs, or portion thereof, surrendered to the District to provide offsets for the facility's NOx emissions. To obtain such a refund the permittee must demonstrate a lower emission rate than the emission rate on which the total offset amount was based and accept practicably enforceable permit conditions that reduce potential NOx emissions to that lower level and apply for the refund within 3 calendar years of the District's approval of the initial permit to operate. Any MERCs or portions thereof, shall be refunded only if the provisions of Subsection (m) of the Alternative MERC Program are satisfied and shall have their lifetimes and lifetime beginning date adjusted in accordance with Subsection (f)(5) of the Alternative MERC Program.~~

Verification: ~~The project owner shall submit any request for a refund of any unneeded NOx ERCs or MERCs or portion thereof to the District and the CPM within three (3) calendar years of the District's approval of the initial permit to operate.~~

AQ-61. On or before the expiration date, if any, of a MERC surrendered to offset the NOx emissions from this facility, ~~Twenty (20) years after the initial firing of the equipment,~~ **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 ~~rolling continuous~~ 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 ~~rolling~~ 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 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-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.

REFERENCES

District 2009a. Final Determination of Compliance, Application Number 986419, San Diego Air Pollution Control District, February 20, 2009.

District 2009b. Letter, Mr. Arthur Carbonell, San Diego Air Pollution Control District, to Ms. Donna Stone, California Energy Commission, March 24, 2009.

CEC 2000 California Energy Commission Final Staff Assessment for the Otay Mesa Project (99-AFC-5C), October 27, 2000.

CEC 2001 California Energy Commission Final Decision Regarding the Otay Mesa Project (99-AFC-5C), April 23, 2001.

Otay 2008 Petition to Amend The Commission Decision on the Otay Mesa Generating Project (99-AFC-5C), April 15, 2008.