Bay Area Air Quality Management District

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Gilroy Energy Center, LLC for the Riverview Energy Center Facility #B4512

Facility Address:

795 Minaker Road Antioch CA 94509

Mailing Address:

2425 Cordelia Road Fairfield CA 94534

Responsible Official

Brent Colbert, Plant Manager (707) 399-4387

Facility Contact

Brent Colbert, Plant Manager (707) 399-4387

Type of Facility: Generation of Electricity

Primary SIC: 4911

Product: Electricity

BAAQMD Permit Division Contact:

Dennis Jang

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Peter Hess for

August 10, 2006

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

TABLE OF CONTENTS

I.	STANDARD CONDITIONS	3
II.	EQUIPMENT	8
III.	GENERALLY APPLICABLE REQUIREMENTS	9
IV.	SOURCE-SPECIFIC APPLICABLE REQUIREMENTS	11
V.	SCHEDULE OF COMPLIANCE	16
VI.	PERMIT CONDITIONS	16
VII.	APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS	24
VIII.	TEST METHODS	33
IX.	TITLE IV ACID RAIN PERMIT	35
X.	PERMIT SHIELD	37
XI.	GLOSSARY	39
XII.	APPLICABLE STATE IMPLEMENTATION PLAN	46
XIII.	TITLE IV ACID RAIN APPLICATION	47
XIV	REVISION HISTORY	48

I. STANDARD CONDITIONS

A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 5/2/01);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 6/28/99);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 8/1/01);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 1/26/99);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 5/17/00);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/99); and

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review

(as amended by the District Board on 5/2/01).

Revision Date: August 10, 2006

B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit was issued on July 18, 2003 and expires on June 30, 2008. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than December 31, 2007, and no earlier than June 30, 2007. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after June 30, 2008. (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records that must be maintained pursuant to this permit that the permittee considers proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (MOP Volume II, Part 3, §4.11)

C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment that is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)

2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be July 18, 2003 to December 31, 2003. The report shall be submitted by January 31, 2004. Subsequent reports shall be for the following periods: January 1st through June 30th and July 1st through December 31st, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be July 1st to June 30th. The certification shall be submitted by July 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105

Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

H. Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
- 3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Any exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

K. Accidental Release

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

L. Conditions to Implement Regulation 2, Rule 7, Acid Rain

- 1. Every year starting January 30, 2003, the permit holder shall hold one sulfur dioxide allowance on January 30 for each ton of sulfur dioxide emitted during the preceding year from January 1 through December 31. (MOP Volume II, Part 3, §4.9)
- 2. The equipment installed for the continuous monitoring of CO2 and NOx shall be maintained and operated in accordance with 40 CFR Parts 72 and 75. (Regulation 2-7, Acid Rain)
- 3. A written Quality Assurance program must be established in accordance with 40 CFR Part 75, Appendix B for NOx which includes, but is not limited to: procedures for daily calibration testing, quarterly linearity testing, record keeping and reporting implementation, and relative accuracy testing. (Regulation 2-7, Acid Rain)
- 4. The permit holder shall monitor SO2 emissions in accordance with 40 CFR Part 72 and 75. (Regulation 2-7, Acid Rain)
- 5. The permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for Turbine, S1. These reports must be submitted within 30 days following the end of each calendar quarter and shall include all information required in § 75.64. (40 CFR Part 75)

II. EQUIPMENT

Table II A - Permitted Sources

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
1	Combustion Gas Turbine,	General Electric	LM6000PC	49.6 MW
	Natural Gas with water		Sprint	500 MMBtu/hour (HHV)
	injection or dry low NOx			
	combustors			

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1	Oxidation Catalyst	1	BAAQMD Condition #20010 parts 18(c) & 18(d)	All operating modes except startup and shutdown	CO: 6 ppmv POC: 2 ppmv
2	Selective Catalytic Reduction System	1	BAAQMD Condition #20010 part 18(a)	All operating modes except startup and shutdown	NOx: 2.5 ppmvd

Table II C – Significant Sources

The following source is exempt from the requirement to obtain an authority to construct and permit to operate, but is defined as a significant source pursuant to BAAQMD Regulation 2-6-239.

S-#	Description	Make or Type	Model	Capacity
2	Cooling Tower	Marley	NC8312HL2	4,160 GPM

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP rules and regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit.

NOTE:

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with <u>both</u> versions of a rule until US EPA has reviewed and approved the District's revision of the regulation.

Table III
Generally Applicable Requirements

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (8/1/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (8/27/99)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (5/15/96)	N
SIP Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (12/23/97)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y

10

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP rules and regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit. All other text may be found in the regulations themselves.

Table IV - A
Source-specific Applicable Requirements
S1 - COMBUSTION GAS TURBINE

A	December 1974	Federally	Future
Applicable	Regulation Title or	Enforceable	Effective Date
Requirement	Description of Requirement General Provisions and Definitions (11/3/93)	(Y/N)	Date
BAAQMD	General Frovisions and Definitions (11/3/93)		
Regulation 1			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	

Table IV - A Source-specific Applicable Requirements S1 - COMBUSTION GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP	General Provisions and Definitions (6/28/99)		
Regulation 1			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	\mathbf{Y}^{1}	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	\mathbf{Y}^{1}	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)		
Rule 1			
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		
Regulation 6			
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD Baculation 0	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
Regulation 9, Rule 9	Turbines (9/21/94)		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-301	Emission Limits, General	Y	
9-9-301.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	Y	
, , 501.5	Monitoring and recordkeeping requirements	Y	

12

Table IV - A Source-specific Applicable Requirements S1 - COMBUSTION GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
Manual of			
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (1/27/82)		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.334(b)(2)	Sulfur and nitrogen content of fuel	Y	
60.335	Test Methods and Procedures	Y	
40 CFR	Permits Regulation (Title IV – Acid Rain Program)	Y	
Part 72			
40 CFR	Continuous Emissions Monitoring	Y	
Part 75			
BAAQMD			
Condition			
#20010			
Definitions	Definitions	Y	
part 11	Consistency with analyses (2-1-403)	Y	
part 12	Conflicts between conditions (1-102)	Y	
part 13	Reimbursement of costs (2-1-303)	Y	
part 14	Access to Records and Facilities (1-440, 1-441)	Y	
part 15	Notification of Commencement of Operation (2-1-302)	Y	

13

Table IV - A
Source-specific Applicable Requirements
S1 - COMBUSTION GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
part 16	Operations (2-1-307)	Y	
part 17	Visible emissions (6-301)	Y	
Part 18	Emission Limits		
Part 18(a)	Emission Limit for NOX (BACT)	Y	
Part 18(b)	Emission Limit for ammonia (BACT)	N	
Part 18(c)	Emission Limit for carbon monoxide (BACT)	Y	
Part 18(d)	Emission Limit for precursor organic compounds (BACT)	Y	
Part 18(e)	Emission Limit for PM10 (BACT, cumulative increase)	Y	
Part 18(f)	Emission Limit for SOX (BACT, cumulative increase)	Y	
Part 19	Turbine Startup (cumulative increase)	Y	
Part 20	Turbine Shutdown (cumulative increase)	Y	
Part 21	Mass emission limits (cumulative increase)	Y	
part 22	Operational Limits (cumulative increase)	Y	
part 23	Monitoring requirements (Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60)	Y	
part 24	Source testing/RATA (40 CFR 60, BAAQMD Manual of Procedures Volume IV)	Y	
part 25	Quality assurance program (40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F)	Y	
part 26	Compliance with 40 CFR 60, Subpart GG (NSPS)	Y	
part 27	Breakdowns (1-208)	Y	
part 28	Breakdown reports (1-208)	Y	
part 29a	Records of fuel use and heat input (cumulative increase)	Y	
part 29b	Records of startups, shutdowns, and malfunctions (BACT, cumulative increase)	Y	
part 29c	Records of emission measurements (BACT, cumulative increase, 40 CFR 60, 40 CFR 75)	Y	
part 29d	Records of hours of operation (cumulative increase)	Y	
part 29e	Records of NOX, CO, and ammonia emissions (BACT)	Y	
part 29f	Records of continuous emission monitoring systems (1-522)	Y	
part 30	Records retention for five years (2-6-501)	Y	
part 31a	Reports of fuel use and heat input (cumulative increase)	Y	
part 31b	Reports of mass emission rates (BACT, cumulative increase)	Y	

Table IV - A
Source-specific Applicable Requirements
S1 - COMBUSTION GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
part 31c	Reports of excess emissions (BACT, cumulative increase)	Y	
part 31d	Reports of nature and cause of excess emissions	Y	
	(BACT, cumulative increase)		
part 31e	Reports of continuous emission monitoring systems downtime (1-522)	Y	
part 31f	Negative declarations (BACT, cumulative increase)	Y	
part 31g	Reports of fuel analyses (cumulative increase, 40 CFR 75)	Y	
part 32	District Operating permit (2-2, 2-6)	Y	
part 33	Title IV and Title V permits (2-6, 2-7)	Y	

¹This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved the District's revision of the regulation.

Table IV - B
Source-specific Applicable Requirements
S2 - COOLING TOWER

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particulates	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

15

V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

Condition #20010

For S-1 Combustion Gas Turbine:

Definitions:

Clock Hour: Any consecutive 60-minute period beginning on the hour

Day: Any continuous 24-hour period beginning at 12:00 AM or 0000

hours.

Year: Any consecutive twelve-month period

Heat Input: All heat inputs refer to the heat input at the higher heating value

(HHV) of the fuel, in Btu/scf.

Firing Hours: Period of time, during which fuel is flowing to a unit, measured in

fifteen-minute increments.

MM Btu: million British thermal units

Gas Turbine Start-up Mode: The time beginning with the introduction of continuous fuel flow to

the Gas Turbine until the requirements listed in Part 18 are met, but

not to exceed 60 minutes.

Gas Turbine Shutdown Mode: The time from non-compliance with any requirement listed in Part

18 until termination of fuel flow to the Gas Turbine, but not to

exceed 30 minutes.

Corrected Concentration: The concentration of any pollutant (generally NO_x, CO or NH₃)

corrected to a standard stack gas oxygen concentration. For an emission point (exhaust of a Gas Turbine) the standard stack gas

oxygen concentration is 15% O₂ by volume on a dry basis

Commissioning Activities: All testing, adjustment, tuning, and calibration activities

recommended by the equipment manufacturers and the

construction contractor to insure safe and reliable steady state operation of the gas turbines, heat recovery steam generators, steam turbine, and associated electrical delivery systems.

Commissioning Period: The Period shall commence when a gas turbine is first fired. The

period shall terminate when the plant has completed performance

testing and is available for commercial operation. The

commissioning period shall not exceed 180 days under any

circumstances.

Precursor Organic

Compounds (POCs): Any compound of carbon, excluding methane, ethane, carbon

monoxide, carbon dioxide, carbonic acid, metallic carbides or

carbonates, and ammonium carbonate

Conditions for the Commissioning Period

- 1. Deleted under applications 10568 and 10569
- 2. Deleted under applications 10568 and 10569
- 3. Deleted under applications 10568 and 10569
- 4. Deleted under applications 10568 and 10569
- 5. Deleted under applications 10568 and 10569
- 6. Deleted under applications 10568 and 10569
- 7. Deleted under applications 10568 and 10569
- 8. Deleted under applications 10568 and 10569
- 9. Deleted under applications 10568 and 10569
- 10. Deleted under applications 10568 and 10569.

The Equipment For Which This Authority To Construct Is Issued May Be Operated Only When In Compliance With The Following Conditions:

- 11. <u>Consistency with Analyses</u>: The owner/operator shall operate all equipment in accordance with all information submitted with the application (and supplements thereof) and the analyses under which this permit is issued unless otherwise noted below. (Basis: BAAQMD 2-1-403)
- 12. <u>Conflicts Between Conditions</u>: In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible. (Basis: BAAQMD 1-102)

17

- 13. Reimbursement of Costs: All reasonable expenses, as set forth in the District's rules or regulations, incurred by the District for all activities that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the owner/operator as required by the District's rules or regulations. (Basis: BAAQMD 2-1-303)
- 14. Access to Records and Facilities: As to any condition that requires for its effective enforcement the inspection of records or facilities by representatives of the District, the Air Resources Board (ARB), the U.S. Environmental Protection Agency (U.S. EPA), or the California Energy Commission (CEC), the owner/operator shall make such records available or provide access to such facilities upon notice from representatives of the District, ARB, U.S. EPA, or CEC. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A. (Basis: BAAQMD 1-440, 1-441)
- 15. <u>Notification of Commencement of Operation</u>: The owner/operator shall notify the District of the date of anticipated commencement of turbine operation not less than 10 days prior to such date. Temporary operations under this permit are granted consistent with the District's rules and regulations. (Basis: BAAQMD 2-1-302)
- 16. <u>Operations</u>: The owner/operator shall properly maintain the gas turbine, emission controls, CEMs and associated equipment in good operating condition at all times when the equipment is in operation. (Basis: BAAQMD 2-1-307)
- 17. <u>Visible Emissions</u>: The owner/operator shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour that is as dark or darker than Ringelmann 1 or equivalent 20% opacity. (Basis: BAAQMD 6-301)
- 18. <u>Emissions Limits</u>: The owner/operator shall only operate S-1 Gas Turbine if all of the following emission limits are met:
 - (a) Oxides of nitrogen (as NO2) emissions from S-1 Gas Turbine into the atmosphere shall not exceed 2.5 ppmvd @ 15% O2 (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify the NOx concentrations from the stack of S-1 by a District-approved continuous emission monitoring system (CEMS) and during any required source test. (basis: BACT)
 - (b) Ammonia emissions from S-1 Gas Turbine into the atmosphere shall not exceed 10.0 ppmvd @ 15% O2 (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify the ammonia

concentration by a District-approved ammonia slip calculation. The owner/operator shall establish the correction factor during a District approved source test, (basis: TRMP)

- (c) Carbon monoxide (CO) emissions from S-1 Gas Turbine into the atmosphere shall not exceed 6.0 ppmvd @ 15 % O2 (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify the CO concentration of S-1 by a District-approved CEMS and during any required source test. (basis: BACT)
- (d) Precursor organic compound (POC) emissions from S-1 Gas Turbine into the atmosphere shall not exceed 2.0 ppmvd @ 15% O2 (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify the POC concentration from the stack of S-1 during any required source test. (basis: BACT)
- (e) Emissions of particulate matter of less than 10 microns in diameter (PM10) from S-1 Gas Turbine into the atmosphere shall not exceed 3.0 pounds per hour, except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify PM10 mass emission rate from the stack of S-1 during any required source test. (basis: BACT, cumulative increase)
- (f) Oxides of sulfur (as SO2) emissions from S-1 Gas Turbine into the atmosphere shall not exceed 1.38 pounds per hour, except during periods of startup and shutdown as defined in this permit. The owner/operator shall verify the SOx emission rate during any required source test. (basis: BACT, cumulative increase)
- 19. <u>Turbine Startup</u>: The owner/operator of S-1 shall not exceed a time period of 60 minutes per start-up, or another time period based on good engineering practice and approved in advance by the District. The startup clock begins with the turbine's initial firing and continues until the unit meets the emission concentration limits. (Basis: Cumulative increase)
- 20. <u>Turbine Shutdown</u>: The owner/operator of S-1 shall not exceed a time period of 30 minutes each per shutdown, or another time period based on good engineering practice and approved in advance by the District. Shutdown begins with initiation of the turbine shutdown sequence and ends with the cessation of turbine firing. (Basis: Cumulative increase)
- 21. <u>Mass Emission Limits</u>: The owner/operator of S-1 shall not exceed the mass emission limits listed in Table 1 below.

Pollutant	Daily	Annual
	(lb/day)	(ton/year)
NOx (as NO ₂)	121	14.7
СО	163	21.5
POC	31	4.1
PM10	72	9.8
SOx (as SO ₂)	32	4.5

The daily and annual mass limits are on a calendar basis. Daily limits shall be based on average one-hour readings and annual limits shall be based on 12-month rolling average one-hour readings from the process monitors (e.g., fuel use meters), CEMS, and source test results; and the monitoring, recordkeeping and reporting conditions of this permit. (Basis: Cumulative increase)

- 22. <u>Operational Limits</u>: In order to assure compliance with the emission limits of this permit, the owner/operator shall comply with the following operational limits:
 - (a) The heat input to the gas turbine not to exceed:

Hourly: 500 MMBtu/hr (HHV)
Daily: 12,000 MMBtu/day (HHV)
Annual: 3,250,000 MMBtu/year (HHV)

(b) The owner/operator shall use only PUC Quality natural gas to fire the gas turbine (General Order 58-a). The owner/operator shall not use natural gas with sulfur concentrations in excess of 1 gr/100 scf.

(Basis: Cumulative Increase)

- 23. <u>Monitoring Requirements</u>: The owner/operator shall comply with the following monitoring requirements for the gas turbine:
 - (a) install and maintain exhaust stack platform with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. (Basis: NSPS, BACT)
 - (b) install and maintain an ammonia injection system with an operational ammonia flowmeter and injection pressure indicator accurate to plus or minus five percent at full scale and to be calibrated once every twelve months. (Basis: BACT)
 - (c) install and maintain a continuously recording emissions monitor(s) for NOx, CO and O₂, or CO₂. Continuous emissions monitors must comply with the requirements of 40

CFR Part 60, Appendices B and F, and 40 CFR Part 75, and be capable of monitoring concentrations and mass emissions during normal operating conditions and during startups and shutdowns. The owner/operator shall record the NOx, CO, and O2 or CO2 concentrations at least once every 15 consecutive minutes. (Basis: NSPS, 40 CFR 75)

- (d) continuously record the fuel flow rate using District-approved fuel flow meters along with quarterly fuel compositional analyses for the measuring the fuel's higher heating value (wet basis). (Basis: Cumulative Increase)
- (e) analyze the total sulfur content of the fuel gas on a quarterly basis. (Basis: BACT, Cumulative Increase, BAAQMD 9-1-302)
- Source Testing/RATA: Within sixty days after first fire of the gas turbines, and at a minimum on an annual basis thereafter, a relative accuracy test audit (RATA) shall be conducted on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications. The owner/operator shall conduct a source test at least once every 8,000 operating hours or three years, whichever comes first. The owner/operator shall provide written test results of the source tests to the District within 60 days after testing. The owner/operator shall submit a complete test protocol to the District no later than 30 days prior to testing, and notification to the District at least ten days prior to the actual date of testing. The owner/operator shall comply with the source test protocol for the following: measurements of NOx, CO, POC, and stack gas oxygen content in accordance with ARB Test Method 100; measurements of PM10 in accordance with ARB Test Method 5; and measurements of ammonia in accordance with Bay Area Air Quality Management District test method ST-1B. Alternative test methods, and source testing scope, may also be used to address the source testing requirements of the permit if approved in advance by the District. The owner/operator shall include initial and periodic source tests parameters specified in the approved test protocol, and at a minimum include the following:
 - (a) NOx (as NO_2) ppmvd at 15% O_2 and lb/MMBtu;
 - (b) Ammonia ppmvd at 15% O₂ (Exhaust);
 - (c) CO ppmvd at 15% O₂ and lb/MMBtu (Exhaust);
 - (d) POC ppmvd at 15% O₂ and lb/MMBtu (Exhaust);
 - (e) $PM_{10} lb/hr$ (Exhaust);
 - (f) SOx lb/hr (Exhaust);
 - (g) Natural gas consumption, fuel High Heating Value (HHV), and total fuel sulfur content;
 - (h) Turbine load in megawatts;
 - (i) Stack gas flow rate (SDCFM) calculated according to procedures in U.S. EPA Method 19.
 - (j) Exhaust gas temperature (°F)

- (k) Ammonia injection rate (lb/hr or moles/hr)
 (Basis: BAAQMD Manual of Procedures, Volume IV, BACT, Cumulative Increase)
- 25. The owner/operator shall establish a written quality assurance program in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60 Appendix F. (Basis: 40 CFR 75)
- 26. Deleted
- 27. The owner/operator shall notify the District in writing of any breakdown condition consistent with the District's breakdown regulations. (Basis: BAAQMD 1-432)
- 28. The owner/operator shall include a breakdown condition description of the equipment malfunction or failure, the date and cause of the initial failure, the estimate of the emissions excess of those allowed, and the actions taken to restore normal operations. (Basis: BAAQMD 1-431)
- 29. <u>Recordkeeping</u>: The owner/operator shall maintain the following records:
 - (a) hourly, daily, quarterly and yearly quantity of fuel used and corresponding heat input rates;
 - (b) the date and time of each occurrence, duration, and type of any startup, shutdown, or malfunction along with the resulting mass emissions during such time period;
 - (c) emission measurements from all source testing, RATAs and fuel analyses;
 - (d) daily, quarterly and yearly hours of operation;
 - (e) hourly records of NOx and CO, emission concentrations and hourly ammonia injection rates and ammonia/NOx ratio.
 - (f) for the continuous emissions monitoring system; performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any continuous emissions monitor.

(Basis: Cumulative Increase, BACT)

- 30. The owner/operator shall maintain all records for at least five years and shall make them available for District inspection upon request. (Basis: BAAQMD 2-6-501)
- 31. <u>Reporting</u>: The owner/operator shall submit to the District a written report for each calendar quarter, within 30 days of the end of the quarter. The required written report shall include:
 - (a) Daily and quarterly fuel use and corresponding heat input rates;
 - (b) Daily, and quarterly mass emission rates for all criteria pollutants during normal operations and during other periods (startup/shutdown, breakdowns);
 - (c) Time intervals, date, and magnitude of excess emissions;

- (d) Nature and cause of the excess emission, and corrective actions taken;
- (e) Time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments;
- (f) A declaration stating periods during which no excess emissions occurred;
- (g) Results of quarterly fuel analyses for HHV and total sulfur content. (Basis: BACT, Cumulative Increase)
- 32. <u>District Operating Permit</u>: The owner/operator shall apply for and obtain all the necessary permits to operate in accordance with the requirements of the District's rules and regulations. (Basis: BAAQMD Regulation 2, Rule 2, Regulation 2, Rule 6)
- 33. <u>Title IV and Title V Permits</u>: The acid rain monitors (Title IV) must be certified within the earlier of 90 operational days or 180 calendar days of first-fire. (Basis: BAAQMD Regulation 2, Rule 7)

23

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), hourly (H), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII - A

Applicable Limits and Compliance Monitoring Requirements
S1 - COMBUSTION GAS TURBINE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
NOx	BAAQMD	Y		9 ppmv @ 15% O2, dry	BAAQMD	С	CEM
	9-9-301.3				9-9-501 and		
					BAAQMD		
					condition		
					#20010, part		
					23c		
	BAAQMD	Y		9 ppmv @ 15% O2, dry	BAAQMD	Once every	Source test
	9-9-301.3				condition	8,000	
					#20010,	operating	
					part 24a	hours or	
						three years,	
						whichever	
						comes first	
NOx	NSPS, 40	Y		99 ppmv @ 15% O2, dry	Monitoring	N	
	CFR 60.332				requirement		
	(a)(1)				subsumed by		
					monitoring		
					for BACT		
					limit. See		
					Permit		
					Shield.		

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1 - COMBUSTION GAS TURBINE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
NOx	None	Y		None	40 CFR 75.10	С	CEM
	BAAQMD	Y		2.5 ppmv @ 15% O2, dry,	BAAQMD	С	CEM
	condition			3-hr average except during	condition		
	#20010,			turbine startup or shutdown	#20010, part		
	part 18(a)				18(a)		
	BAAQMD	Y		2.5 ppmv @ 15% O2, dry,	BAAQMD	P/A	Source test
	condition			3-hr average except during	condition		
	#20010,			turbine startup or shutdown	#20010,		
	part 18(a)				part 24a		
	BAAQMD	Y		121 lb/ day	BAAQMD	C	CEM
	condition			(as NO2)	condition		
	#20010,				#20010,		
	part 21				part 23c		
	BAAQMD	Y		14.7 tons per year	BAAQMD	С	CEM
	condition			(as NO2)	condition		
	#20010,				#20010,		
	part 21				part 23c		
CO	BAAQMD	Y		6 ppmv @ 15% O2, dry,	BAAQMD	С	CEM
	condition			3-hr average except during	condition		
	#20010,			turbine startup or shutdown	#20010,		
	part 18(c)				parts 18(c)		
					and 23c		
	BAAQMD	Y		6 ppmv @ 15% O2, dry,	BAAQMD	Once every	Source test
	condition			3-hr average except during	condition	8,000	
	#20010,			turbine startup or shutdown	#20010,	operating	
	part 18(c)				part 24c	hours or	
						three years,	
						whichever	
						comes first	
	BAAQMD	Y		163 lb/ day	BAAQMD	C	CEM
	condition				condition		
	#20010,				#20010,		
	part 21				part 23c		

25

 $\begin{tabular}{ll} Table\ VII\ -\ A\\ Applicable\ Limits\ and\ Compliance\ Monitoring\ Requirements\\ S1-COMBUSTION\ GAS\ TURBINE \end{tabular}$

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
CO	BAAQMD	Y		21.5 tons per year	BAAQMD	С	CEM
	condition				condition		
	#20010,				#20010,		
	part 21				part 23c		
CO2		Y		None	40 CFR 75.10	C	CEM (CO2)
							or CEM
							(O2) or fuel
							flow
							monitor
SO2	BAAQMD	Y		GLC ¹ of 0.5 ppm for 3 min		N	
	9-1-301			or 0.25 ppm for 60 min or			
				0.05 ppm for 24 hours			
	BAAQMD	Y		300 ppm (dry)	BAAQMD	P/Q	Fuel Gas
	9-1-302				condition		Total sulfur
					#20010,		content
					part 23e		analysis
SO2	NSPS	Y		0.015% (vol.)	Monitoring	N	
	40 CFR			@15% O ₂ (dry)	Requirement		
	60.333(a)				subsumed by		
					requirement		
					for PUC		
					quality		
					natural gas.		
					See Permit		
					Shield.		
SO2	None	Y		None	40 CFR		Fuel
					75.11, 40		measure-
					CFR 75,		ments,
					Appendix D,		calculations
					part 2.3		
	BAAQMD	Y		1.38 lb/hr	BAAQMD	P/Q	Fuel gas
	condition				condition		Total sulfur
	#20010,				#20010,		content
	part 18(f)				part 23e		analysis

26

Table VII - A Applicable Limits and Compliance Monitoring Requirements S1 - COMBUSTION GAS TURBINE

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
SO2	BAAQMD condition #20010, part 18(f)	Y		1.38 lb/hr	BAAQMD condition #20010, part 24f	P/A	Source test
	BAAQMD condition #20010, part 21	Y		32 lb/ day	BAAQMD condition #20010, part 23e	P/Q	Fuel Gas Total sulfur content analysis
	BAAQMD condition #20010, part 21	Y		4.5 tons/year	BAAQMD condition #20010, part 23e	P/Q	Fuel gas Total sulfur content analysis
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	BAAQMD condition #20010, part 18	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour or equivalent 20% opacity		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
PM10	BAAQMD condition #20010, part 18(e)	Y		3 lb/ hr	BAAQMD condition #20010, part 24e	Once every 8,000 operating hours or three years, whichever comes first	Source test

27

$\begin{tabular}{ll} Table\ VII\ -\ A\\ Applicable\ Limits\ and\ Compliance\ Monitoring\ Requirements\\ S1-COMBUSTION\ GAS\ TURBINE \end{tabular}$

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD	Y		72 lb/day	BAAQMD	Once every	Source Test
	condition				condition	8,000	
	#20010,				#20010,	operating	
	part 21				parts 23d, 24e	hours or	
						three years,	
						whichever	
						comes first	
PM10	BAAQMD	Y		9.8 tons/year	BAAQMD	Once every	Source Test
	condition				condition	8,000	
	#20010,				#20010,	operating	
	part 21				part 24e	hours or	
						three years,	
						whichever	
						comes first	
POC	BAAQMD	Y		2 ppmv @ 15% O2, dry,	BAAQMD	С	Source test
	condition			1-hr average except during	condition		
	#20010,			turbine startup or shutdown	#20010,		
	part 18(d)				part 24d		
	BAAQMD	Y		2 ppmv @ 15% O2, dry,	BAAQMD	Once every	Source test
	condition			1-hr average except during	condition	8,000	
	#20010,			turbine startup or shutdown	#20010,	operating	
	part 18(d)				part 24d	hours or	
						three years,	
						whichever	
	D			04.11.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.		comes first	
	BAAQMD	Y		31 lb/calendar day	BAAQMD	Once every	Source test
	condition				condition	8,000	
	#20010,				#20010,	operating	
	part 21				part 24d	hours or	
						three years,	
						whichever	
						comes first	

28

 $\begin{tabular}{ll} Table\ VII\ -\ A\\ Applicable\ Limits\ and\ Compliance\ Monitoring\ Requirements\\ S1-COMBUSTION\ GAS\ TURBINE \end{tabular}$

			E-4		3.5	Maritania	
Т	C'4-4'	ы	Future		Monitoring	Monitoring	Mandania
Type of	Citation of	FE	Effective	T.	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
	BAAQMD	Y		4.1 ton/year	BAAQMD	Once every	Source test
	condition				condition	8,000	
	#20010,				#20010,	operating	
	part 21				part 24d	hours or	
						three years,	
						whichever	
						comes first	
NH3	BAAQMD	N		10 ppmv @ 15% O2, dry,	BAAQMD	C	Measure-
	condition			averaged over 1 hr except	condition		ment ratio
	#20010,			during turbine startup or	#20010,		NH3 to
	Part 18(b)			shutdown	parts 18.2 and		NOX inlet
					23b		rate at SCR
	BAAQMD	N		10 ppmv @ 15% O2, dry,	BAAQMD	Once every	Source test
	condition			averaged over 1 hr except	condition	8,000	
	#20010,			during turbine startup or	#20010,	operating	
	Part 18(b)			shutdown	part 24b	hours or	
						three years,	
						whichever	
						comes first	
Heat	BAAQMD	Y		500 MM BTU/hr (HHV)	BAAQMD	С	Fuel meter,
input	condition				condition		firing
limit	#20010,				#20010,		monitor
	part 22				part 23d		
Heat	BAAQMD	Y		500 MM BTU/hr (HHV)	BAAQMD	P/Q	Fuel
input	condition				condition		composition
limit	#20010,				#20010,		analysis
	part 22				part 23d		
	BAAQMD	Y		500 MM BTU/hr (HHV)	BAAQMD	Once every	Source test
	condition			, ,	condition	8,000	
	#20010,				#20010,	operating	
	part 22				part 24g	hours or	
						three years,	
						whichever	
						comes first	

29

Table VII - A

Applicable Limits and Compliance Monitoring Requirements

S1 – COMBUSTION GAS TURBINE

			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective	T,	Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
	BAAQMD	Y		12,000 MM BTU/day	BAAQMD	С	fuel meter,
	condition			(HHV)	condition		firing
	#20010,				#20010,		monitor,
	part 22				part 23d		calculations
	BAAQMD	Y		12,000 MM BTU/day	BAAQMD	P/Q	Fuel
	condition			(HHV)	condition		composition
	#20010,				#20010,		analysis
	part 22				part 23d		
Heat	BAAQMD	Y		3,250,000 MM BTU/yr	BAAQMD	С	fuel meter,
input	condition			(HHV)	condition		firing
limit	#20010,				#20010,		monitor,
	part 22				part 23d		calculations
	BAAQMD	Y		3,250,000 MM BTU/yr	BAAQMD	P/Q	Fuel
	condition			(HHV)	condition		composition
	#20010,				#20010,		analysis
	part 22				part 24d		
MW				None	BAAQMD	Once every	Source test
					condition	8,000	
					#20010,	operating	
					part 24h	hours or	
						three years,	
						whichever	
						comes first	
Exhaust				None	BAAQMD	Once every	Source test
Gas					condition	8,000	
tempe-					#20010,	operating	
rature					part 24j	hours or	
						three years,	
						whichever	
						comes first	

30

$\begin{tabular}{ll} Table\ VII\ -\ A\\ Applicable\ Limits\ and\ Compliance\ Monitoring\ Requirements\\ S1-COMBUSTION\ GAS\ TURBINE \end{tabular}$

Type of	Citation of	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Type
Stack gas				None	BAAQMD	Once every	Source test
flow rate					condition	8,000	
					#20010,	operating	
					part 24i	hours or	
						three years,	
						whichever	
						comes first	
NH3				None	BAAQMD	Once every	Source test
injection					condition	8,000	
rate					#20010,	operating	
					part 24k	hours or	
						three years,	
						whichever	
						comes first	
Start-up	BAAQMD			60 minutes per start-up	BAAQMD	P/E	Records
Period	condition				condition		
	#20010,				#20010,		
	part 19				part 29(b)		
Shutdown	BAAQMD			30 minutes per shutdown	BAAQMD	P/E	Records
Period	condition				condition		
	#20010,				#20010,		
	part 20				part 29(b)		

31

Table VII - B Applicable Limits and Compliance Monitoring Requirements S2 - COOLING TOWER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD Regulation 6-301	Y		< Ringelmann 1 for more than 3 min/hr		N	
Particulate Weight	BAAQMD Regulation 6-310	Y		0.15 grains per dscf		N	

32

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Limits & Compliance Monitoring Requirements, of this permit.

Table VIII Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6-301		
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
6-310		
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,
9-1-302		Continuous Sampling, or
		ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD	Emission Limits – Turbines	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,
9-9-301.3	Rated > 10 MW s/SCR	Continuous Sampling and
		ST-14, Oxygen, Continuous Sampling
NSPS	Standards of Performance for	1 0
Subpart GG	Stationary Gas Turbines	
1	(1/27/82)	
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur
	,	Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur
		Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel
		Gases
		ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation
NSPS 40 CFR	40 CFR 60, Appendix A	EPA Method 7, Determination of Nitrogen Oxide Emissions from
	40 CFK 60, Appendix A	Stationary Sources
60.8		EPA Method 20, Determination of Nitrogen Oxides, Sulfur
		Dioxide, and Diluent Emissions from Stationary Gas Turbines
BAAQMD		
Cond# 19684		
Part 18(a)	NOx Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous
		Emission Stack Sampling
Part 18(b)	NH3 Limit	BAAQMD Test Procedure ST-1B, Ammonia, Integrated
		Sampling
Part 18(c)	CO Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous
		Emission Stack Sampling

VIII. Test Methods

Table VIII Test Methods

Applicable					
Requirement	Description of Requirement	Acceptable Test Methods			
Part 18(d)	POC Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous			
		Emission Stack Sampling			
Part 18(e)	PM10 Limit	Test Procedure ARB 5, Determination of Particulate Matter			
		Emissions from Stationary Sources and EPA Method 202,			
		Condensable Particulate Matter			
Part 18(f)	SOx Limit	Test Procedure, MOP Vol.4, ST-19A, Sulfur Dioxide, Continuous			
		Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample			

IX. TITLE IV ACID RAIN PERMIT

Effective July 18, 2003 through June 30, 2008

ISSUED TO:

Gilroy Energy Center, LLC for the Riverview Energy Center 2425 Cordelia Road Fairfield, CA 94534

PLANT SITE LOCATION:

795 Minaker Road Antioch, CA 94509

ISSUED BY:

Signed by Peter Hess for August 10, 2006

Jack P. Broadbent, Air Pollution Control Officer Date

Type of Facility: Simple-Cycle Generation Facility

Primary SIC: 4911
Product: Electricity

DESIGNATED REPRESENTATIVE

Name: Michael Sommer Title: General Manager Phone: (925) 252-2075

ALTERNATE DESIGNATED REPRESENTATIVE:

Name: C. David Zeiger

Title: Compliance Manager

Phone: (925) 252-2066

IX. Title IV Acid Rain Permit

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO₂ allowance allocated under this permit and NOx requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements of conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in he application.

1) STATEMENT OF BASIS

Statutory and Regulatory Authorities: In accordance with District Regulation 2, Rule 7 and Titles IV and V of the Clean Air Act, the Bay Area Air Quality Management District issues this permit pursuant to District Rule Regulation 2, Rule 7.

2) SO2 ALLOWANCE ALLOCATIONS

	Year	2003	2004	2005	2006	2007	
	SO ₂ allowances	None	None	None	None	None	
	under Table 2 of 40						
	CFR Part 73						
S-1, Turbine	NOx Limit	This unit is not subject to the NOx requirements from					
		40 CFR Part 76 as this unit is not capable of firing on					
		coal.					

3) COMMENTS, NOTES AND JUSTIFICATIONS

None

4) PERMIT APPLICATION

Attached

X. PERMIT SHIELD

A. Non-applicable Requirements

Pursuant to District Regulations 2-6-233 and 2-6-409.12, the federally enforceable regulations and/or standards cited in the following table[s] do not apply to the source or group of sources identified at the top of the table[s]. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the regulatory and/or statutory provisions cited, as long as the reasons listed below remain valid for the source or group of sources covered by this shield.

Table X A - 1
Permit Shield for Non-applicable Requirements
S-1 – COMBUSTION GAS TURBINE

Citation	Title or Description
	(Reason not applicable)
BAAQMD	Air Pollution Episode Plan (3/20/91)
Regulation 4	
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)

BAAQMD Regulation 4 requires facilities emitting more than 100 tons/yr of any pollutant to submit an air pollution episode plan. Because the facility's potential to emit is limited by permit conditions to less than 100 tons/yr for all pollutants, Regulation 4 is not applicable to the facility.

X. Permit Shield

B. Subsumed Requirements:

Pursuant to District Regulations 2-6-233.2 and 2-6-409.12, as of the date this permit is issued, the federally enforceable monitoring, recordkeeping, and reporting requirements cited in the following table for the source or group of sources identified at the top of the table[s] are subsumed by the monitoring, recordkeeping, and reporting for more stringent requirements or by a "hybrid" monitoring scheme. The District has determined that compliance with the requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the subsumed monitoring requirements. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the subsumed monitoring requirements cited.

Table IX B - 1
Permit Shield for Subsumed Requirements
S 1 – COMBUSTION GAS TURBINE

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
40 CFR	Fuel-to-water monitoring	BAAQMD	Continuous emission monitoring for
60.334 (a)		Condition	2.5 ppmv NOx limit @ 15% oxygen
		19684,	
		part 23	
40 CFR	Periods of excess emissions, NOx	BAAQMD	Requirement for continuous emission
60.334(c)(1)		Condition	monitor for NOx
		19684,	
		Part 23	

XI. GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

API

American Petroleum Institute

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

BARCT

Best Available Retrofit Control Technology

Basis

The underlying authority that enables the District to impose requirements.

C5

An Organic chemical compound with five carbon atoms

C6

An Organic chemical compound with six carbon atoms

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAPCOA

California Air Pollution Control Officers Association

CEC

California Energy Commission

CEQA

California Environmental Quality Act

CEM

A "continuous emission monitor" is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NOx concentration) in an exhaust stream.

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon Monoxide

CO₂

Carbon Dioxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

dscm

Dry Standard Cubic Meter

E 6, E 9, E 12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, $4.53 ext{ E 6}$ equals $(4.53) ext{ x } (10^6) = (4.53) ext{ x } (10 ext{ x } 10 ext{ x } 10 ext{ x } 10 ext{ x } 10) = 4,530,000$. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District Regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part

52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

FR

Federal Register

GDF

Gasoline Dispensing Facility

GLM

Ground Level Monitor

grains

1/7000 of a pound

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

H₂S

Hydrogen Sulfide

HHV

Higher Heating Value. The quantity of heat evolved as determined by a calorimeter where the combustion products are cooled to 60F and all water vapor is condensed to liquid.

LHV

Lower Heating Value. Similar to the higher heating value (see HHV) except that the water produced by the combustion is not condensed but retained as vapor at 60F.

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

41

MOP

The District's Manual of Procedures

MSDS

Material Safety Data Sheet

NA

Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPs

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons

NMOC

Non-methane Organic Compounds (Same as NMHC)

NOx

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O2

The chemical name for naturally occurring oxygen gas.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

Oxidation Catalyst

A material used in combustion systems to reduce emissions of carbon monoxide and organics

by promoting oxidation reactions.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Total Particulate Matter

PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

RATA

Stands for Relative Accuracy Test Audit. A test conducted to certify the accuracy of the Continuous Emission Monitor (CEM).

SCR

A "selective catalytic reduction" unit is an abatement device that reduces NOx concentrations in the exhaust stream of a combustion device. SCRs utilize a catalyst, which operates at a specific temperature range, and injected ammonia to promote the conversion of NOx compounds to nitrogen gas.

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO₂

Sulfur dioxide

SO2 Bubble

An SO2 bubble is an overall cap on the SO2 emissions from a defined group of sources, or from an entire facility. SO2 bubbles are sometimes used at refineries because combustion sources are typically fired entirely or in part by "refinery fuel gas" (RFG), a waste gas product from refining operations. Thus, total SO2 emissions may be conveniently quantified by monitoring the total amount of RFG that is consumed, and the concentration of H2S and other sulfur compounds in the RFG.

SO₃

Sulfur trioxide

THC

Total Hydrocarbons (NMHC + Methane)

therm

100,000 British Thermal Unit

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

TRMP

Toxic Risk Management Plan

TSP

Total Suspended Particulate

TVP

True Vapor Pressure

VOC

Volatile Organic Compounds

Units of Measure:

bbl	=	barrel of liquid (42 gallons)
bhp	=	brake-horsepower
btu	=	British Thermal Unit
C	=	degrees Celsius
F	=	degrees Fahrenheit
f^3	=	cubic feet
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound

in inches = maximum max m^2 square meter min minute = M = thousand Mg mega-gram, one thousand grams = micro-gram, one millionth of a gram μg = MM million = millimeter mm million btu MMbtu mm Hg millimeters of Mercury (pressure) =MWmegawatts parts per million, by volume ppmv parts per million, by weight ppmw = psia pounds per square inch, absolute =pounds per square inch, gauge psig = scfm standard cubic feet per minute = yr year =

Symbols:

<

=

> = greater than \leq = less than or equal to \geq = greater than or equal to

less than

XII. APPLICABLE STATE IMPLEMENTATION PLAN

The Bay Area Air Quality Management District's portion of the State Implementation Plan can be viewed at the EPA Region 9 website. The address is:

http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions

XIII. TITLE IV ACID RAIN APPLICATION



Acid Rain Permit Application

to autoritantan tau W Name	Revised		
is submission is: 👱 New	Revised		
Riiverview Energy Center		CA	55963

STEP 2

ORIS code.

STEP 1

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

Identify the source by plant name, State, and

	· · · · · · · · · · · · · · · · · · ·		
а	b	С	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
Unit No. 1	Yes	March 1, 2003	Sept 1, 2003
	Yes		

Riiverview Energy Center		
Plant Name (from Step 1)	 	

Permit Requirements

STEP 3

Read the standard requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Riiverview Energy Center	
Plant Name (from Step 1)	

STEP 3, Cont'd. <u>Nitrogen Oxides Requirements</u> The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Riiverview Energy Center	•		
Plant Name (from Step 1)			

Step 3. Cont'd.

Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source. (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase Il repowering extension plans) and 40 CFR 76.11 (NO, averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative

of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 ČFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy

Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification STEP 4

Read the certification statement. sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

William Ferguson, General Manager Name		Ŀ
Signature William Farm	Date	12/19/62



Certificate of Representation

e 1

	Och infoato of the	procorream	
	For more information, see instructions and	I refer to 40 CFR 72.24	
	This submission is: New Revise instructions)	ed (revised submissions must	be complete; see
	This submission includes combustion or p	rocess sources under 40 CFI	R part 74 🔲
EP 1	Riverview Energy Center	CA State	55963 DRIS Code
ntify the source by nt name, State, and IS code.			L
EP 2 ter requested	Name Michael J. Sommer		
ormation for the signated presentative.	Address P.O. Box 551 Pittsburg, CA 94565		
	(925) 252-2075 Phone Number	(925) 252-2073 Fax Number	
	E-mail address (if available) Michaels@calpine.com	m .	
EP 3 ter requested	David Zeiger Name		
ormation for the ernate designated	(925) 252-2066 Phone Number	(925) 252-2066 Fax Number	
	E-mail address (if available) davidz@calpine.com	d representative or alternate de	esignated representative
	I certify that I was selected as the designated as applicable, by an agreement binding on each affected unit at the source.	•	
EP 4 Implete Step 5, read	I certify that I have given notice of the agreer for the affected source and each affecte representation, in a newspaper of general ci State publication designed to give general p	nent, selecting me as the `de d unit at the source identifi rculation in the area where the public notice.	ed in this certificate of a source is located or in a
e certifications, and gn and date. For a	I certify that I have all necessary authority to Rain Program on behalf of the owners and unit at the source and that each such own		

S

C th designated representative of a combustion or process source under 40 CFR part 74, the references in the certifications to "affected unit" or "affected units" also

inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under

apply to the combustion or process source under 40 CFR part 74 and the references to "affected source" also apply to the source at which the combustion or process source is located.

life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

The agreement by which I was selected as the alternate designated representative, if applicable, includes a procedure for the owners and operators of the source and affected units at the source to authorize the alternate designated representative to act in lieu of the designated representative.

Riverview Energy Center	• .	Certificate - Page 2
lant Name (from Step 1)		Page 2 of 2

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

α	
ignature (designated representative)	12/29/04
ignature (alternate designated representative)	12/29/04 ate

STEP 5
Provide the name of every owner and operator of the source and identify each affected unit (or combustion or process source) they own and/or operate.

Gilroy Energ	y Center, LLC	1				
Name	4.7	X Owner	Operator			
Unit No. 1						
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					Owner	Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

XIV. REVISION HISTORY

Title V Permit Issuance:

July 18, 2003

Significant Revision: (application 10569) August 10, 2006

• Increase the daily facility mass emission limits for NOx and CO to reflect the potential operating scenario of 4 gas turbine start-ups per day. (Condition #20100, part 21)

- Revise the ammonia slip monitoring language to agree with standard language in other Calpine power plant permits. (Condition #20100, part 18b)
- Change the required source test frequency for the gas turbine from annual to once every 8000 hours of gas turbine operation or once every 3 years, whichever comes first. (Condition #20100, part 24)
- Delete obsolete permit conditions that apply to the commissioning period only. (Condition #20100, parts 1 through 10)
- The definition of hour will be revised to clock hour since the facility monitors emissions on a clock hour basis. (definitions section)
- The facility name will be changed to "Gilroy Energy Center, LLC for the Riverview Energy Center".
- The responsible official and facility contact have been changed to Brent Colbert and the mailing address has been changed.
- The designated representative and alternate designated representative for the Acid Rain permit have been changed to Michael J. Sommer and C. David Zeiger, respectively, in accordance with the revised Certificate of Representation that Calpine submitted to EPA on December 30, 2004.
- Condition #20010, part 24 has been revised to allow 60 days for the submittal of source test results instead of the current 30-day allowance. This change is necessary because source test firms typically cannot deliver a final report within 30 days of the testing date.
- Table VII-A has been corrected to show daily NOx and CO emission limits of 121 lb/day and 163 lb/day, respectively. This agrees with condition #20010, part 21.
- Condition #20100, part 26 has been deleted. This condition specified an EPA-approved custom schedule for fuel sulfur content monitoring to satisfy Subpart GG. Due to revisions to Subpart GG, this custom schedule is obsolete and has been replaced with natural gas fuel certification that is satisfied with quarterly fuel testing.