Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Los Esteros Critical Energy Facility, LLC
Facility #B3289

Facility Address:
800 Thomas Foon Chew Way
San Jose, CA 95134

Mailing Address:
800 Thomas Foon Chew Way
San Jose, CA 95134

Responsible Official	**Facility Contact**
Terry Mahoney, General Manager	Rosemary Silva, EHS Specialist
408-361-4928	408-361-4954

Type of Facility:	Generation of Electricity	BAAQMD Permit Division Contact:
Primary SIC:	4911	Brenda Cabral
Product:	Electricity	415 749-4686

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Damian Breen for Jack P. Broadbent — May 30, 2018
Jack P. Broadbent, Executive Officer/APCO — Date

TABLE OF CONTENTS

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 5/4/11);

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 12/6/17);

SIP Regulation 2, Rule 1 - Permits, General Requirements (as approved by EPA through 8/1/16);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review (as amended by the District Board on 12/6/17);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration (as approved by EPA through 8/1/16);

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on 12/6/17);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking (as approved by EPA through 12/4/17);

BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants (as amended by the District Board on 12/7/16);

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on 12/6/17); and

SIP Regulation 2, Rule 6 – Permits, Major Facility Review (as approved by EPA through 6/23/95).

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

1. This Major Facility Review Permit was issued on May 30, 2018 and expires on May 29, 2023. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than November 29, 2022 and no earlier than May 29, 2022. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after May 29, 2023.** If the permit renewal has not been issued by May 29, 2023, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 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 permit holder to halt or reduce the permitted activity in order to maintain compliance with such term

I. Standard Conditions

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 re-issuance, 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 required to be maintained pursuant to this permit that the permit holder 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. (BAAQMD Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

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)

I. Standard Conditions

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment, which 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; 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. Reports shall be for the following periods: December 1st through May 31st and June 1st through November 30th, 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 by e-mail to compliance@baaqmd.gov or by postal mail to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V Reports

(Regulation 2-6-502; 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 June 1st to May 31st. The certification shall be submitted by June 30th 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 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 by

I. Standard Conditions

e-mail to r9.aeo@epa.gov or postal mail to the Environmental Protection Agency at the following address:

Director
Enforcement Division, TRI & Air Section (ENF-2-1)
USEPA Region 9
75 Hawthorne Street
San Francisco, California 94105

(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)

I. Standard Conditions

J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. 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 March 1 (February 29th during leap year) 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 O2 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 Turbines, S1, S2, S3, and S4. 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	Gas Turbine Generator, Natural Gas fired with water injection, 49.4 MW nominal	General Electric	LM6000PC	500 MMbtu/hr (HHV)
2	Gas Turbine Generator, Natural Gas fired with water injection, 49.4 MW nominal	General Electric	LM6000PC	500 MMbtu/hr (HHV)
3	Gas Turbine Generator, Natural Gas fired with water injection, 49.4 MW nominal	General Electric	LM6000PC	500 MMbtu/hr (HHV)
4	Gas Turbine Generator, Natural Gas fired with water injection, 49.4 MW nominal	General Electric	LM6000PC	500 MMbtu/hr (HHV)
5	Fire Water Pump Diesel Engine	Clarke 2002	JW6H-UF40	300 bhp 14.5 gal/hr
7	Heat Recovery Steam Generator (HRSG) with Natural Gas fired Duct burners			139 MMbtu/hr (HHV)
8	Heat Recovery Steam Generator (HRSG) with Natural Gas fired Duct burners			139 MMbtu/hr (HHV)
9	Heat Recovery Steam Generator (HRSG) with Natural Gas fired Duct burners			139 MMbtu/hr (HHV)
10	Heat Recovery Steam Generator (HRSG) with Natural Gas fired Duct burners			139 MMbtu/hr (HHV)
11	Six Cell Cooling Tower			73,000 gallons per minute
14	Gas Turbine Generator, Natural Gas fired with water injection, 49.4 MW nominal	General Electric	LM6000PC	500 MMbtu/hr (HHV)

II. Equipment

Table II-B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
9	Oxidation catalyst	1	BAAQMD Condition #23688, parts 19c & 19d	All conditions except startup and shutdown	2 ppmvd CO and 1 ppmvd POC @ 15% O_2, dry, both 1-hr average
10	Selective Catalytic Reduction System	1	BAAQMD Condition #23688, part 19a	All conditions except startup and shutdown	2 ppmvd NOx @ 15%O_2, dry, 1-hr average
11	Oxidation catalyst	2	BAAQMD Condition #23688, parts 19c & 19d	All conditions except startup and shutdown	2 ppmvd CO and 1 ppmvd POC @ 15% O_2, dry, both 1-hr average
12	Selective Catalytic Reduction System	2	BAAQMD Condition #23688, part 19a	All conditions except startup and shutdown	2 ppmvd NOx @ 15%O_2, dry, 1-hr average
13	Oxidation catalyst	3	BAAQMD Condition #23688, parts 19c & 19d	All conditions except startup and shutdown	2 ppmvd CO and 1 ppmvd POC @ 15% O_2, dry, both 1-hr average
14	Selective Catalytic Reduction System	3	BAAQMD Condition #23688, part 19a	All conditions except startup and shutdown	2 ppmvd NOx @ 15%O_2, dry, 1-hr average
15	Oxidation catalyst	4	BAAQMD Condition #23688, parts 19c & 19d	All conditions except startup and shutdown	2 ppmvd CO and 1 ppmvd POC @ 15% O_2, dry, both 1-hr average
16	Selective Catalytic Reduction System	4	BAAQMD Condition #23688, part 19a	All conditions except startup and shutdown	2 ppmvd NOx @ 15%O_2, dry, 1-hr average

II. Equipment

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	Drift Rate	Capacity
NA	Cooling Tower	1-Cell Mechanical Draft	0.0005%	16,000 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. This section also contains provision that may apply to temporary sources.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered significant sources pursuant to the definition in BAAQMD Rule 2-6-239.

Portable equipment operating in accordance with the ARB portable equipment registration program and temporary equipment such as sandblasting equipment may be operated at the facility.

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

NOTE:

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

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/4/11)	N
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (12/6/17)	N
SIP Regulation 2, Rule 1	General Requirements (8/1/16)	Y
BAAQMD Regulation 2-1-429	Federal Emissions Statement (12/21/04)	Y
BAAQMD Regulation 2, Rule 2	Permits, New Source Review (12/6/17)	N
SIP Regulation 2, Rule 2	Permits, New Source Review (8/1/16)	Y
BAAQMD Regulation 2, Rule 3	Permits, Power Plants (12/19/79)	Y
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (12/6/17)	N
SIP Regulation 2, Rule 4	Permits, Emissions Banking (12/4/17)	Y
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (12/7/16)	N
BAAQMD Regulation 2, Rule 6	Permits, Major Facility Review (12/6/17)	N
SIP Regulation 2, Rule 6	Permits, Major Facility Review (6/23/95)	Y
BAAQMD Regulation 2, Rule 9	Permits, Interchangeable Emission Reduction Credits (6/15/05)	N
BAAQMD Regulation 3	Fees	N
BAAQMD Regulation 5	Open Burning (6/19/13)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule1	Particulate Matter General Requirements (12/5/07)	Y
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	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 (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (7/1/09)	N
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
SIP Regulation 8, Rule 40	Organic Compounds – Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	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 (7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06)	N
SIP Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/97)	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/98)	Y
BAAQMD Regulation 11, Rule 18	Reduction of Risk from Air Toxic Emissions at Existing Facilities (11/15/17)	N
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
BAAQMD Regulation 14, Rule 1	Mobile Source Emission Reduction Methods – Bay Area Commuter Benefits Program (3/19/14)	N
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
California Health and Safety Code Title 17, Section 93115 et seq.	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	N
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	N

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (7/20/04)	Y
40 CFR 82	Protection of Stratospheric Ozone (03/12/04)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions – Required Practices (04/13/05)	Y
Subpart F, 40 CFR 82.161	Recycling and Emissions Reductions – Technician Certification (04/13/05)	Y
Subpart F, 40 CFR 82.166	Recycling and Emissions Reductions – Reporting and Recordkeeping Provisions (04/13/05)	Y
Subpart H	Protection of Stratospheric Ozone; Halon Emissions Reduction (03/05/98)	Y
Subpart H 82.270(b)	Prohibitions, Halon (03/05/98)	Y

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 parentheses 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. Additionally, where an applicable requirement is a SIP requirement, the full language of SIP requirements is on EPA Region 9's website: http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions. All other text may be found in the regulations themselves.

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION,
S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	**General Provisions and Definitions (5/4/11)**		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NO_x, CO_2, or O_2	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
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	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
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 Regulation 1	**General Provisions and Definitions (6/28/99)**		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
BAAQMD Regulation 2, Rule 1	**Regulation 2, Rule 1 - Permits, General Requirements (12/6/17)**		
2-1-501	Monitors	Y	
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-304	Tube Cleaning (HRSG Only)	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-310.3	Heat Transfer Operations	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann Number 1 Limitation	Y	
6-304	Tube Cleaning (HRSG Only)	Y	
6-305	Visible Particles	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-1-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	N	
9-1-302	General Emission Limitations	N	
SIP Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD Regulation 9, Rule 3	**Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/82)**		
9-3-303	New or Modified Heat Transfer Operation Limits	N	
BAAQMD Regulation 9, Rule 9	**Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06)**		
9-9-113	Exemption – Inspection/Maintenance	N	
9-9-114	Exemption – Start-Up/Shutdown	N	
9-9-301	Emission Limits, General	N	
9-9-301.1.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	N	
9-9-301.2	Emission Limits, General	N	
9-9-401	Certification, Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
SIP Regulation 9 Rule 9	**Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/97)**		
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 greater than 10 MW with SCR, NO_x less than 9 ppmv (dry, 15% O_2)	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD Manual of Procedures, Volume V	**Continuous Emission Monitoring Policy and Procedures (1/20/82)**	Y	
40 CFR 60	**Standards of Performance for New Stationary Sources – General Provisions (1/28/09)**	Y	
Subpart A	**General Provisions**	Y	
60.7	Notification and Recordkeeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards in this part	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 KKKK	**Standards of Performance for Stationary Combustion Turbines (7/6/06)**		
60.4300	What is the purpose of this subpart? Control of emissions from stationary combustion turbines (SCT) that commenced construction, modification, or reconstruction after February 18, 2005	Y	
60.4305	Does this subpart apply to my stationary turbine?	Y	
60.4305(a)	Applicable to SCT with heat input ≥ 10 MMbtu/hr (at turbine only). Emission requirements in subpart also applies to HRSG and duct burner	Y	
60.4305(b)	SCT exempt from Subpart GG and HRSG/duct burner exempt from Subparts Da, Db, and Dc	Y	
60.4315	What pollutants are regulated by this subpart? NOx and SO2	Y	
60.4320	What emission limits must I meet for nitrogen oxides (NOX)?	Y	
60.4320(a)	Comply with Table 1 NOx requirements for new turbine firing natural gas, electric generating turbine > 50 MMbtu/hr and ≤ 850 MMbtu/hr: 25 ppm at 15% O2	Y	
60.4320(h)	30-day rolling average for combined cycle plants	Y	
60.4330	What emission limits must I meet for sulfur dioxide (SO2)?	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.4330(a)	Turbines located in continental area must comply with (a)(1), (a)(2), or (a)(3)	Y	
60.4330(a)(2)	SO2 emissions to not exceed 0.060 lb/MMbtu	Y	
60.4333	What are my general requirements for complying with this subpart?	Y	
60.4333(a)	General Requirements for operation and maintenance	Y	
60.4335	How do I demonstrate compliance for NOX if I use water or steam injection?	Y	
60.4335(b)(1)	NOx and CO2 or O2 CEMs to determine NOx emissions	Y	
60.4345	What are the requirements for the continuous emission monitoring system equipment, if I choose to use this option?	Y	
60.4345(a)	NOx CEMs installed and certified pursuant to Performance Specification 2 in appendix B, or appendix A of Part 75. RATA of the CEMs is required.	Y	
60.4345(b)	NOx CEMs operating requirements	Y	
60.4345(c)	Fuel flow meter requirements	Y	
60.4345(d)	Steam flow meter, pressure and temperature device requirements	Y	
60.4345(e)	QA plan for CEMs, flow meters, and pressure and temperature devices	Y	
60.4350	How do I use data from the continuous emission monitoring equipment to identify excess emissions?	Y	
60.4365	How can I be exempted from monitoring the total sulfur content of the fuel?	Y	
60.4365(a)	Exemption from sulfur content monitoring for firing natural gas with less than 20 grains of sulfur per 100 scf	Y	
60.4375	What reports must I submit?	Y	
60.4375(a)	Reporting requirements in accordance with 60.7(c)	Y	
60.4380	How are excess emissions and monitor downtime defined for NOX?	Y	
60.4380(b)	NOx excess emissions and downtime for turbines with CEMs	Y	
60.4395	When must I submit my reports? All reports must be postmarked by the 30th day following the end of each 6-month period	Y	
60.4400	NOx initial and subsequent performance test requirements and methodologies	Y	
60.4405	Alternative NOx initial performance test for turbines with NOx CEMs	Y	
60.4415	SO2 initial and subsequent performance test requirements and methodologies	Y	
60.4420	Definitions	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 60 Appendix B	**Performance Specifications**		
Performance Specification 2	Specifications and Test Procedures for SO2 and NOx Continuous Emission Monitoring Systems in Stationary Sources	Y	
40 CFR part 72	**Permits Regulation (Title IV – Acid Rain Program)**	Y	
	Subpart A – Acid Rain Program General Requirements		
72.6	Applicability	Y	
72.6(a)(3)(i)	New utility unit (at the time of commencement of commercial operation)	Y	
72.9	Standard Requirements	Y	
72.9(a)	Permit Requirements	Y	
72.9(a)(1)(i)	Submittal of a complete acid rain permit application	Y	
72.9(a)(1)(iii)	Submittal of supplemental information in a timely manner	Y	
72.9(a)(2)(i)	Operation in compliance with Acid Rain permit application or a superseding Acid Rain permit	Y	
72.9(a)(2)(ii)	Have an Acid Rain Permit	Y	
72.9(b)	Monitoring Requirements	Y	
72.9(c)	Sulfur Dioxide Requirements	Y	
72.9(c)(1)	Requirement to hold allowances as of allowance transfer deadline	Y	
72.9(c)(2)	Each ton of excess SO_2 emissions is a separate violation of the CAA	Y	
72.9(c)(3)	Initial deadline to hold allowances	Y	
72.9(c)(3)(iv)	Deadline at time of monitor certification	Y	
72.9(c)(4)	Use of Allowance Tracking System	Y	
72.9(c)(5)	Allowances may not be deducted prior to year for which allowance was allocated	Y	
72.9(c)(6)	Limited authorization	Y	
72.9(d)	Nitrogen Oxide Requirements	Y	
72.9(e)	Excess emissions requirements	Y	
72.9(f)	Recordkeeping and Reporting Requirements	Y	
72.9(g)	Liability	Y	
72.9(h)	Effect on Other Authorities	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Subpart C – Acid Rain Permit Applications		
72.30(a)	Requirement to apply	Y	
72.30(c)	Duty to reapply. Requirement to submit complete acid rain application 6 months prior to expiration of current acid rain permit.	Y	
72.31	Information requirements for Acid Rain permit applications	Y	
72.31(a)	Identification of affected source	Y	
72.31(b)	Identification of each affected emissions unit	Y	
72.31(c)	Complete compliance plan	Y	
72.31(d)	Standard requirements under 40 CFR 72.9	Y	
72.31(e)	If the Acid Rain permit application is for Phase II and the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification.	Y	
72.32	Permit application shield and binding effect of permit application	Y	
	Subpart E – Acid Rain Permit Contents		
72.50	General	Y	
72.50(a)	Acid Rain Permits	Y	
72.50(a)(1)	Permits must contain all elements of complete Acid Rain permit application under 40 CFR 72.31	Y	
72.50(b)	Permits include terms in 40 CFR 72.2	Y	
72.51	Permit Shield	Y	
40 CFR part 75	**Continuous Emissions Monitoring**	Y	
	Subpart A – General	Y	
75.2	Applicability	Y	
75.2(a)	Applicability to affected units subject to Acid Rain emission limitations	Y	
75.2(c)	The provisions of this part apply to sources subject to a State or federal NO_X mass emission reduction program, to the extent these provisions are adopted as requirements under such a program	Y	
75.4	Compliance Dates	Y	
75.4(b)	New affected unit (at the time of the commencement of commercial operation) shall ensure that all monitoring systems required under this part for monitoring of SO_2, NO_x, CO_2, opacity, and volumetric flow are installed and all certification tests are completed on or before the later of the following dates	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.4(b)(2)	180 calendar days after the date the unit commences commercial operation, notice of which date shall be provided under subpart G of this part.	Y	
75.5	Prohibitions	Y	
	Subpart B – Monitoring Provisions	Y	
75.10	General Operating Requirements	Y	
75.10(a)	Primary Measurement Requirement	Y	
75.10(a)(1)	SO_2 Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	Y	
75.10(a)(2)	NO_x Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	Y	
75.10(a)(3)	CO_2 Emissions	Y	
75.10(a)(3)(ii)	CO_2 Emissions estimated using Carbon Content of fuel and procedures in Appendix G.	Y	
75.10(b)	Primary Equipment Performance Requirements Requires each CEM to meet equipment, installation, and performance specifications in part 75, Appendix A and quality assurance/quality control requirements in part 75 Appendix B.	Y	
75.10(c)	Heat Input Rate Measurement Requirement	Y	
75.10(d)	Primary equipment hourly operating requirements	Y	
75.10(d)(1)	Cycles of operation for each 15 minute period. Hourly average calculated from data points in 15-minute quadrants.	Y	
75.10(d)(3)	Validity of data and data substitution	Y	
75.10(f)	Minimum measurement capability requirement	Y	
75.10(g)	Minimum recording and recordkeeping requirements	Y	
75.11	Specific provisions for monitoring SO_2 emissions	Y	
75.11(d)	Gas-fired and oil-fired units	Y	
75.11(d)(2)	Allows the use of Appendix D Optional SO_2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO_2 emissions.	Y	
75.12	Specific provisions for monitoring NO_x emission rates	Y	
75.12(a)	NO_x continuous emission monitor and diluent monitoring requirements for gas-fired non-peaking units	Y	
75.12(c)	NO_x mass emission rate determination according to Appendix F	Y	
75.13	Specific provisions for monitoring CO_2 emissions	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.13(b)	Determination of CO_2 emissions using Appendix G	Y	
75.14	Specific Provisions for monitoring opacity	Y	
75.14(c)	Gas-Fired Units Exempt from Opacity Monitoring	Y	
	Subpart C – Operation and Maintenance Requirements	Y	
75.20	Initial certification and recertification procedures	Y	
75.20(a)	Initial certification approval process	Y	
75.20(b)	Recertification approval process	Y	
75.20(c)	Initial certification and recertification procedures	Y	
75.20(g)	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	Y	
75.21	Quality assurance and quality control requirements	Y	
75.21(a)	Continuous emission monitoring systems	Y	
75.21(c)	Calibration gases	Y	
75.21(d)	Notification for periodic Relative Accuracy Test Audits	Y	
75.21(e)	Consequences of audits	Y	
75.22	Reference test methods	Y	
75.24	Out-of-control periods and adjustment for system bias	Y	
	Subpart D – Missing Data Substitution Procedures	Y	
75.30	General Provisions	Y	
75.30(a)	Owner/operator shall provide substitute data for each affected unit using a continuous emission monitor according to this subpart whenever the unit is combusting fuel.	Y	
75.31	Initial missing data procedures	Y	
75.32	Determination of monitor data availability for standard missing data procedures	Y	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate Note: Hg not applicable	Y	
75.33(a)	Following initial certification and after following initial missing data procedures for 2,160 quality assured operating hours for NO_x continuous emissions monitors system the owner/operator shall follow the data substitution procedures in paragraphs (b), (c), and Table 2 of this section.	Y	
75.33(c)	Volumetric flow rate, NO_x emission rate and NO_x concentration data	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.34	Units with add-on emission controls	Y	
75.35	Missing data procedures for CO_2	Y	
75.36	Missing data procedures for heat input rate determinations	Y	
	Subpart F – Recordkeeping Requirements	Y	
75.53	Monitoring plan	Y	
75.53(a)	General provisions	Y	
75.53(b)	Updates to monitoring plan	Y	
75.53(e)	Contents of monitoring plan	Y	
75.53(f)	Contents of monitoring plan for specific situations	Y	
75.53(g)	Contents of the monitoring plan after January 1, 2009	Y	
75.53(h)	Contents of monitoring plan for specific situations	Y	
75.57	General recordkeeping provisions	Y	
75.57(a)	General recordkeeping provisions for affected sources	Y	
75.57(b)	Operating parameter record provisions. The owner or operator shall record for each hour the following information on unit operating time, heat input rate, and load, separately for each affected unit.	Y	
75.57(c)	SO_2 emission record provisions	Y	
75.57(d)	NO_x emission record provisions	Y	
75.57(e)	CO_2 emission record provisions	Y	
75.57(g)	Diluent record provisions	Y	
75.57(h)	Missing data records	Y	
75.58	General recordkeeping provisions for specific situations	Y	
75.58(b)	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	Y	
75.58(c)	Specific SO_2 emission record provisions for gas-fired or oil-fired units using optional protocol in appendix D to this part. In lieu of recording the information in §75.57(c), the owner or operator shall record the applicable information in this paragraph for each affected gas-fired or oil-fired unit for which the owner or operator is using the optional protocol in appendix D to this part for estimating SO_2 mass emissions	Y	
75.59	Certification, quality assurance, and quality control record provisions	Y	
75.59(a)	Continuous emission or opacity monitoring systems	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
75.59(b)	Excepted monitoring systems for gas-fired and oil-fired units. The owner or operator shall record the applicable information in this section for each excepted monitoring system following the requirements of appendix D to this part or appendix E to this part for determining and recording emissions from an affected unit.	Y	
75.59(c)	Except as otherwise provided in §75.58(b)(3)(i), units with add-on SO_2 or NO_x emission controls following the provisions of §75.34(a)(1) or (a)(2), the owner or operator shall keep the following records on-site in the quality assurance/quality control plan required by section 1 of appendix B to this part:	Y	
75.59(e)	DAHS Verification. For each DAHS (missing data and formula) verification that is required for initial certification, recertification, or for certain diagnostic testing of a monitoring system, record the date and hour that the DAHS verification is successfully completed. (This requirement only applies to units that report monitoring plan data in accordance with §75.53(g) and (h).)	Y	
	Subpart G – Reporting Requirements	Y	
75.60	General Provisions	Y	
75.61	Notifications	Y	
75.62	Monitoring plan submittals	Y	
75.63	Initial certification or recertification application	Y	
75.64	Quarterly reports	Y	
75.66	Petitions to the administrator	Y	
BAAQMD Condition #23688	Condition #23688 for Combined Cycle operation		
Definitions	Definitions	Y	
Equipment Description	Equipment Description	Y	
part 1	Minimization of emissions during commissioning period (Cumulative Increase)	Y	
part 2	Tuning to minimize emissions (Cumulative Increase)	Y	
part 3	Installation, adjustment and operation of SCR and oxidation catalyst as early as possible (Cumulative Increase)	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (Cumulative Increase)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, Offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, Offsets)	Y	
part 8	Limit on uncontrolled operation during commissioning (Offsets)	Y	
part 9	Mass emission rates during commissioning included in annual limits (Offsets)	Y	
part 10	Mass emission rates during commissioning (cumulative increase)	Y	
part 11	Source test (BACT for NOx and CO, Offsets)	Y	
part 12	Consistency with analyses (2-1-403)	Y	
part 13	Conflicts between conditions (1-102)	Y	
part 14	Reimbursement of costs (2-1-303)	Y	
part 15	Access to Records and Facilities (1-440, 1-441)	Y	
part 16	Notification of Commencement of Operation (2-1-302)	Y	
part 17	Operations (2-1-307)	Y	
part 18	Visible emissions (6-1-301)	Y	
part 19	Emission Limits	Y	
part 19a	Emission limits for NOX (BACT)	Y	
part 19b	Emission limit for ammonia (Regulation 2, Rule 5)	N	
part 19c	Emission limits for carbon monoxide (BACT)	Y	
part 19d	Emission limits for precursor organic compounds (BACT)	Y	
part 20	Turbine Startup (BACT, Cumulative Increase)	Y	
part 21	Turbine Shutdown (Cumulative Increase)	Y	
part 22	Mass emission limits (Cumulative Increase)	Y	
part 23	Sulfuric Acid Limit (Cumulative Increase)	Y	
part 24	Operational Limits (Cumulative Increase)	Y	
part 25	Monitoring requirements (Cumulative Increase, BACT, 40 CFR 75, 40 CFR 60)	Y	
part 26	Source testing/RATA (40 CFR 60, BAAQMD Manual of Procedures Volume IV)	Y	
part 27	Compliance with SAM emission limit (PSD avoidance, SAM periodic monitoring)	Y	

IV. Source-Specific Applicable Requirements

Table IV - A
Source-specific Applicable Requirements
S1, S2, S3, S4, & S14, COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS (HRSG)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 28	Quality assurance program (40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F)	Y	
part 30	Breakdowns (1-208)	Y	
part 31	Breakdown reports (1-208)	Y	
part 32a	Records of fuel use and heat input (Cumulative Increase)	Y	
part 32b	Records of date and time of each occurrence, duration and type start-up shutdown, or malfunction (BACT, Cumulative Increase)	Y	
part 32c	Records of emission measurements (BACT, Cumulative Increase, 40 CFR 60, 40 CFR 75)	Y	
part 32d	Records of hours of operation (Cumulative Increase)	Y	
part 32e	Records of NOX, CO, and ammonia emissions (BACT)	Y	
part 32f	Records of continuous emission monitoring systems (1-522)	Y	
part 33	Records retention for five years (2-6-501)	Y	
part 34a	Reports of fuel use and heat input (Cumulative Increase)	Y	
part 34b	Reports of mass emission rates (BACT, Cumulative Increase)	Y	
part 34c	Reports of excess emissions (BACT, Cumulative Increase)	Y	
part 34d	Reports of nature and cause of excess emissions (BACT, Cumulative Increase)	Y	
part 34e	Reports of continuous emission monitoring systems downtime (1-522)	Y	
part 34f	Negative declarations (BACT, Cumulative Increase)	Y	
part 34g	Reports of fuel analyses (Cumulative Increase, 40 CFR 75)	Y	
part 35	Emission offsets (Emission Offsets)	Y	
part 36	District Operating permit (Regulation 2, Rules 2 and 6)	Y	
Part 43	Maximum toxic air contaminant emissions (Regulation 2, Rule 5)	N	
Part 44	Calculation method for toxic air contaminant emissions (Regulation 2, Rule 5)	N	
Part 45	Toxic air contaminant emissions test requirements (Regulation 2, Rule 5)	N	
Part 48	Use of S14, Turbine, during maintenance of S1, S2, S3, or S4 (cumulative increase)	Y	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S5 FIREWATER PUMP DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**		
6-1-303	Ringelmann Number 2 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-303	Ringelmann Number 2 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9, Rule 8	**Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Engines (7/25/07)**		
9-8-110	Exemptions	N	
9-8-110.5	Limited Exemption Emergency Standby Engines	N	
9-8-330	Emergency Standby Engines, Hours of Operation	N	
9-8-330.1	Unlimited hours for emergency use	N	
9-8-330.3	50 hours for reliability and maintenance	N	
9-8-502	Recordkeeping	N	
9-8-502.1	Monthly records of usage	N	
9-8-530	Emergency standby engines, monitoring and recordkeeping	N	
40 CFR Part 63 Subpart A	National Emissions Standards for Hazardous Air Pollutants for Source Categories, Subpart A – General Provisions		
63.1	General Applicability of the General Provisions	Y	
63.2	Definitions	Y	
63.3	Units and Abbreviations	Y	
63.4	Prohibited activities and circumvention	Y	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S5 FIREWATER PUMP DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6(a)	Compliance with standards and maintenance requirements - Applicability	Y	
63.6(c)	Compliance dates for existing sources	Y	
63.6(f)(2)	Methods for determining compliance	Y	
63.6(f)(3)	Finding of compliance	Y	
63.6(g)	Use of an alternative non-opacity emission standard	Y	
63.6(i)	Compliance extension procedures and criteria	Y	
63.6(j)	Presidential compliance exemption	Y	
63.10(a)	Recordkeeping and reporting requirements, applicability and general information	Y	
63.10(b)(1)	Record retention	Y	
63.10(d)(1)	General reporting requirements	Y	
63.10(f)	Administrator waiver of recordkeeping or reporting requirements	Y	
63.12	State authority and delegations	Y	
63.13	Addresses of air pollution control agencies and EPA Regional Offices	Y	
63.14	Incorporation by reference	Y	
63.15	Availability of information and confidentiality	Y	
40 CFR Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)		
63.6585	Applicability	Y	
63.6585(a)	Applicable to stationary RICE	Y	
63.6585(c)	An area source of HAPS is a source that is not a major source.	Y	
63.6590(a)(1)(iii)	Affected source under stationary RICE located at an area source of HAP emissions, constructed before 6/12/06	Y	
63.6595(a)	Comply with applicable emission limitations and operating limitations by 5/3/13.	Y	
63.6595(c)	Comply with applicable notification requirements in 63.6645 and 40 CFR Part 63, subpart A. (Note there are no applicable notification requirements under either of these sections)	Y	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S5 FIREWATER PUMP DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6603(a)	Comply with requirements of Table 2d, Part 4 (operating limitations of Tables 1b and 2b do not apply): 1. Change oil & filter every 500 hours of operation or annually, whichever comes first. Oil analysis program may be used to extend period. 2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first 3. Inspect all hoses and belts every 500 hours or annually, whichever comes first, and replace as necessary.	Y	
63.6605	General Requirements 1. Must be in compliance with applicable emission limitations and operating limitations 2. Operate engine in a manner consistent with safety and good air pollution control practices to minimize emissions.	Y	
63.6625(e)(3)	Maintain RICE and abatement controls according to manufacturer's instructions or develop own plan.	Y	
63.6625(f)	Install non-resettable hour meter (if one is not already installed)	Y	
63.6625(h)	Minimize idling, and minimize startup time to not exceed 30 minutes.	Y	
63.6640(a)	Demonstrate compliance with the requirements of Table 2d according to work or management practices of Table 6, Part 9a.	Y	
63.6640(b)	Report deviations from the requirements of Table 2d. Note: any deviations will be reported in accordance with Section I.F and I.G of this permit.	Y	
63.6640(e)	Report non-compliance with any applicable requirement of Table 8.	Y	
63.6640(f)	Comply with requirements of (f)(1)(i) through (iii) below	Y	
63.6640(f)(1)(i)	No time limit when engine is used for emergencies	Y	
63.6640(f)(1)(ii)	Operation of engine for maintenance checks and readiness testing limited to 100 hours per year	Y	
63.6640(f)(1)(iii)	Operation of engine for non-emergency and not associated with maintenance checks and readiness testing is limited to 50 hours, which is counted towards the 100 hours per year maximum specified in 63.6640(f)(1)(ii)	Y	
63.6645(a)(5)	The notification requirements of 63.6645(a) do not apply to this engine.	Y	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S5 FIREWATER PUMP DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.6655(a)	Record Keeping (2) Records of occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment. (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.	Y	
63.6655(d)	The owner/operator must keep the records required in Table 6, part 9, of this subpart to show continuous compliance with each emission or operating limitation that applies to the given RICE.	Y	
63.6655(e)	You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary RICE	Y	
63.6660	Instructions for Records	Y	
63.6670	Implementation and enforcement of Subpart ZZZZ	Y	
Table 6	Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices	Y	
Part 9	Work or Management practices: Operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions	Y	
Table 8	Applicability of General Provisions to Subpart ZZZZ	Y	
CCR, Title 17, Section 93115	**ATCM for Stationary Compression Ignition Engines**	N	
93115.5	Fuel Requirements	N	
93115.6	ATCM for Stationary CI Engines – Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards	N	
93115.6(b)	In-Use Emergency Standby Diesel-Fueled CI Engine (> 50 bhp) Operating Requirements and Emission Standards	N	
93115.10	Recordkeeping, Reporting and Monitoring Requirements	N	
93115.10(a)	Reporting	N	
93115.10(b)	Demonstration of Compliance with Emission Limits	N	

IV. Source-Specific Applicable Requirements

Table IV - B
Source-specific Applicable Requirements
S5 FIREWATER PUMP DIESEL ENGINE

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
93115.10(d)(1)	Monitoring Equipment	N	
93115.10(d)(1)	Non-resettable hour meter		
93115.10(f)	Reporting Requirements for Emergency Standby Engines	N	
93115.12	ATCM for Stationary CI Engines – Compliance Schedule for Owners or Operators of Four or More Engines (>50 bhp) Located within a District	N	
93115.11(a)	Compliance by 1/1/06 for engines complying by reducing hours of operation	N	
93115.15	Severability	N	
BAAQMD Condition #23688			
Part 39	Reliability-related activities limited to 50 hours per year for S5 (Stationary Diesel ATCM)	N	
Part 40	Operation Limits for S5 (Stationary Diesel ATCM)	N	
Part 41	Non-resettable fuel meter required to S5 (Stationary Diesel ATCM)	N	
Part 42	Recordkeeping requirements for S5 (Stationary Diesel ATCM)	N	

IV. Source-Specific Applicable Requirements

Table IV - C
Source-specific Applicable Requirements
ONE CELL COOLING TOWER
S11, SIX CELL COOLING TOWER

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-311	General Operations	Y	
6-1-401	Appearance of Emissions	N	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**		
6-301	Ringelmann Number 2 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-311	General Operations	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Condition #23688	Applies to S11 only		
Part 46	Drift losses [cumulative increase, 2-1-319]	Y	
Part 47	Monitoring [cumulative increase, 2-1-319]	Y	

V. SCHEDULE OF COMPLIANCE

A. Standard 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 23688

Definitions:

Clock Hour:	Any continuous 60-minute period beginning on the hour.
Calendar Day:	Any continuous 24-hour period beginning at 12:00 AM or 0000 hours.
Year:	Any consecutive twelve-month period of time
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 lesser of the first 120 minutes of continuous fuel flow to the Gas Turbine after fuel flow is initiated or the period of time from Gas Turbine fuel flow initiation until the Gas Turbine achieves two consecutive CEM data points in compliance with the emission concentration limits of subparts 19(a) and 19(c) and is in compliance with the emission limits contained in subparts 19(a) and 19(c).
Gas Turbine Shutdown Mode:	The lesser of the 30 minute period immediately prior to the termination of fuel flow to the Gas Turbine or the period of time from non-compliance with any requirement listed in subparts 19(a) through 19(d) until termination of fuel flow to the Gas Turbine
Corrected Concentration:	The concentration of any pollutant (generally NO_x, CO or NH_3) corrected to a standard stack gas oxygen concentration. For a Gas Turbine emission point, the standard stack gas oxygen concentration is 15% O_2 by volume on a dry basis
Commissioning Activities (initial startup):	All testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the construction contractor to insure safe and reliable steady state

VI. Permit Conditions

	operation of the gas turbines, heat recovery steam generators, steam turbine, and associated electrical delivery systems.
Commissioning Period (initial startup):	The Period shall commence when all mechanical, electrical, and control systems are installed and individual system start-up has been completed, or when a gas turbine is first fired following the installation of the duct burners and associated equipment, whichever occurs first. The period shall terminate when the plant has completed performance testing, is available for commercial operation, and has initiated sales of power to the grid. The Commissioning Period shall not exceed 180 days under any circumstances.
Alternate Calculation:	A District approved calculation used to calculate mass emission data during a period when the CEM or other monitoring system is not capable of calculating mass emissions.
Precursor Organic Compounds (POCs):	Any compound of carbon, excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate

Equipment Description:

1. This Authority to Construct is issued and is valid for this equipment only while it is in the configuration set forth in the following description:

Four Combined-Cycle Gas Turbine Generator Power Trains consisting of:

a. Combustion Gas Turbine, General Electric LM6000PC, Maximum Heat Input 500 MMbtu/hr (HHV), 49.4 MW (nominal), Natural Gas-Fired

b. Heat Recovery Steam Generator, equipped with low-NOx duct burners, 139 MMbtu/hour, Natural Gas Fired

c. Selective Catalytic Reduction (SCR) NOx Control System.

d. Ammonia Injection System.
(including the ammonia storage tank and control system)

e. Oxidation Catalyst (OC) System.

f. Continuous emission monitoring system (CEMS) designed to continuously record the measured gaseous concentrations, and calculate and continuously monitor and record the NOx and CO concentrations in ppmvd corrected to 15% oxygen on a dry basis. The CEM shall also calculate, using District approved methods, and log any mass limits required by these conditions.

2. Clarke JW6H-UF40 fire pump and fire pump.

VI. Permit Conditions

3. Six Cell Cooling Tower, 73,000 gallons per minute with drift eliminator of 0.0005% removal efficiency.

4. One spare Gas Turbine, General Electric LM6000PC, Maximum Heat Input 500 MMbtu/hr (HHV), 49.4 MW (nominal), Natural Gas-Fired

Permit Conditions:

Conditions for the Commissioning Period:

1. The owner/operator of the Los Esteros Critical Energy Facility shall minimize the emissions of carbon monoxide and nitrogen oxides from S1, S2, S3 and S4 Gas Turbines and S7, S8, S9, and S10 Heat Recovery Steam Generators to the maximum extent possible during the commissioning period. Parts 1 through 11 shall only apply during the commissioning period as defined above. Unless noted, parts 12 through 47 shall only apply after the commissioning period has ended. (basis: cumulative increase)
2. At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the owner/operator shall tune the S1, S2, S3 and S4 Gas Turbine combustors to minimize the emissions of carbon monoxide and nitrogen oxides. (basis: cumulative increase)
3. At the earliest feasible opportunity and in accordance with the recommendations of the equipment manufacturers and the construction contractor, the owner/operator shall install, adjust and operate the SCR Systems (A10, A12, A14 & A16) and OC Systems (A9, A11, A13 & A15) to minimize the emissions of nitrogen oxides and carbon monoxide from S1, S2, S3 and S4 Gas Turbines and S7, S8, S9, and S10 Heat Recovery Steam Generators. (basis: cumulative increase)
4. Coincident with the steady-state operation of SCR Systems (A10, A12, A14 & A16) and OC Systems (A9, A11, A13 & A15) pursuant to part 3, the owner/operator shall operate the facility in such a manner that the Gas Turbines (S1, S2, S3 and S4) comply with the NOx and CO emission limitations specified in parts 19a and 19c. (basis: BACT, offsets)
5. The owner/operator of the Los Esteros Critical Energy Facility shall submit a plan to the District Permit Services Division at least two weeks prior to first firing of S1, S2, S3 & S4 Gas Turbines and/or S7, S8, S9, & S10 HRSGs describing the procedures to be followed during the commissioning of the turbines in the combined-cycle configuration. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the water injection, the installation and operation of the required emission control systems, the installation, calibration, and testing of the CO and NOx continuous emission monitors, and any activities requiring the firing of the Gas Turbines (S1, S2, S3 and S4) without abatement by their respective SCR Systems. The Gas Turbines (S1, S2, S3 and S4) shall be fired in combined cycle mode no sooner than fourteen days after the District receives the commissioning plan. (basis: cumulative increase)

VI. Permit Conditions

6. During the commissioning period, the owner/operator of the Los Esteros Critical Energy Facility shall demonstrate compliance with parts 8 through 10 through the use of properly operated and maintained continuous emission monitors and data recorders for the following parameters:

   a. firing hours

   b. fuel flow rates

   c. stack gas nitrogen oxide emission concentrations,

   d. stack gas carbon monoxide emission concentrations

   e. stack gas oxygen concentrations.

   The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the S1, S2, S3 and S4 Gas Turbines and S7, S8, S9, and S10 Heat Recovery Steam Generators. The owner/operator shall use District-approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NO_x and CO emission concentrations, summarized for each clock hour and each calendar day. All records shall be retained on site for at least 5 years from the date of entry and made available to District personnel upon request. If necessary to ensure that accurate data is collected at all times, the owner/operator shall install dual span emission monitors. (basis: cumulative increase)

7. The owner/operator shall install, calibrate and make operational the District-approved continuous monitors specified in part 6 prior to first firing of each turbine (S1, S2, S3 and S4 Gas Turbines) and HRSG (S7, S8, S9, and S10 Heat Recovery Steam Generators). After first firing of the turbine, the owner/operator shall adjust the detection range of these continuous emission monitors as necessary to accurately measure the resulting range of CO and NOx emission concentrations. The type, specifications, and location of these monitors shall be subject to District review and approval. If necessary to ensure accurate data is collected at all times, the owner/operator shall install dual-span monitors. (basis: BAAQMD 9-9-501, BACT, offsets)

8. The owner/operator shall not operate the facility such that the number of firing hours of S1, S2, S3 and S4 Gas Turbines and/or S7, S8, S9, and S10 Heat Recovery Steam Generators without abatement by SCR or OC Systems exceeds 250 hours for each power train during the commissioning period. Such operation of the S1, S2, S3 and S4 Gas Turbines without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR or OC system in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 250 firing hours without abatement shall expire. (basis: offsets)

9. The total mass emissions of nitrogen oxides, carbon monoxide, precursor organic compounds, PM_{10}, and sulfur dioxide that are emitted by the S1, S2, S3 and S4 Gas Turbines and S7, S8, S9, and S10 Heat Recovery Steam Generators during the commissioning period shall accrue towards the consecutive twelve-month emission limitations specified in part 22. (basis: offsets)

VI. Permit Conditions

10. The owner/operator shall not operate the facility such that the pollutant mass emissions from each turbine (S1, S2, S3 and S4 Gas Turbines) and corresponding HRSG (S7, S8, S9, and S10 Heat Recovery Steam Generators) exceed the following limits during the commissioning period. These emission limits shall include emissions resulting from the start-up and shutdown of the S1, S2, S3 and S4 Gas Turbines.

	Without Controls		With Controls	
a. NO_x (as NO_2)	1464 lb/day	102 lb/hr	1464 lb/day	61 lb/hr
b. CO	1056 lb/day	88 lb/hr	984 lb/day	41 lb/hr
c. POC (as CH_4)	288 lb/day		114 lb/day	

(basis: cumulative increase)

11. Within one hundred and twenty (120) days of startup, the owner/operator shall conduct a District approved source test using external continuous emission monitors to determine compliance with part 20. The source test shall determine NOx, CO, and POC emissions during start-up and shutdown of the gas turbines. The results of the source test must be submitted within 165 days of startup. The POC emissions shall be analyzed for methane and ethane to account for the presence of unburned natural gas. The source test shall include a minimum of three start-up and three shutdown periods. Thirty (30) days before the execution of the source tests, the owner/operator shall submit to the District a detailed source test plan designed to satisfy the requirements of this part. The owner/operator shall be notified of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District comments into the test plan. The owner/operator shall notify the District within ten (10) days prior to the planned source testing date. Source test results shall be submitted to the District within 60 days of the source testing date. These results can be used to satisfy applicable source testing requirements in Part 26 below. (basis: offsets)

Conditions for Operation:

12. Consistency with Analyses: Operation of this equipment shall be conducted 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)

13. Conflicts Between Conditions: In the event that any part herein is determined to be in conflict with any other part contained herein, then, if principles of law do not provide to the contrary, the part most protective of air quality and public health and safety shall prevail to the extent feasible. (Basis: BAAQMD 1-102)

14. 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

VI. Permit Conditions

reimbursed by the owner/operator as required by the District's rules or regulations. (Basis: BAAQMD 2-1-303)

15. Access to Records and Facilities: As to any part 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)

16. Notification of Commencement of Operation: 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)

17. Operations: The owner/operator shall insure that the gas turbines, HRSGs, emissions controls, CEMS, and associated equipment are properly maintained and kept in good operating condition at all times. (Basis: BAAQMD 2-1-307)

18. Visible Emissions: The owner/operator shall insure that no air contaminant is discharged from the LECEF into the atmosphere for a period or periods aggregating more than three minutes in any one hour, which is as dark as or darker than Ringelmann 1 or equivalent 20% opacity. (Basis: BAAQMD 6-1-301; SIP 6-301)

19. Emissions Limits: The owner/operator shall operate the facility such that none of the following limits are exceeded:

    a. The emissions of oxides of nitrogen (as NO_2) from emission points P1, P2, P3, and P4 (combined exhaust of gas turbine/HRSG power trains S1 & S7, S2 & S8, S3 & S9, and S4 & S10, respectively) each shall not exceed 2.0 ppmvd @ 15% O_2 (1-hour rolling average), except during periods of gas turbine startup and shutdown as defined in this permit; and shall not exceed 4.68 lb/hour (1-hour rolling average) except during periods of gas turbine startup as defined in this permit. The NOx emission concentration shall be verified by a District-approved continuous emission monitoring system (CEMS) and during any required source test. (basis: BACT)

    b. Emissions of ammonia from emission points P1, P2, P3, and P4 (combined exhaust of gas turbine/HRSG power trains S1 & S7, S2 & S8, S3 & S9, and S4 & S10, respectively) each shall not exceed 5 ppmvd @ 15% O_2 (3-hour rolling average), except during periods of start-up or shutdown as defined in this permit. The ammonia emission concentration shall be verified by the continuous recording of the ammonia injection rate, the NOx inlet emissions into the SCR control system, the NOx outlet rate at the stack, and the total heat input of the combustion turbine and duct burner, using a District-approved ammonia slip calculation. (basis: Regulation 2, Rule 5)

    c. Emissions of carbon monoxide (CO) from emission points P1, P2, P3, and P4 (combined exhaust of gas turbine/HRSG power trains S1 & S7, S2 & S8, S3 & S9, and S4 & S10, respectively) each shall not exceed 2.0 ppmvd @ 15 % O_2 (1-hour rolling average), except

VI. Permit Conditions

during periods of start-up or shutdown as defined in this permit; and shall not exceed 2.85 lb/hr (1-hour rolling average) except during periods of start-up as defined in this permit. The CO emission concentration shall be verified by a District-approved CEMS and during any required source test. (basis: BACT)

d. Emissions of precursor organic compounds (POC) from emission points P1, P2, P3, and P4 (combined exhaust of gas turbine/HRSG power trains S1 & S7, S2 & S8, S3 & S9, and S4 & S10, respectively) each shall not exceed 1 ppmvd @ 15% O2 (1-hour average), except during periods of gas turbine start-up or shutdown as defined in this permit; and shall not exceed 0.81 lb/hr (1-hour average) except during periods of start-up as defined in this permit. The POC emission concentration shall be verified during any required source test. (basis: BACT)

20. Turbine Start-up: The project owner shall ensure that the regulated air pollutant mass emission rates from each of the Gas Turbines (S1, S2, S3, and S4) during a start-up do not exceed the limits established below. (Basis: BACT, Cumulative increase)

	Duration (Minutes)	NOx (lb/Event)	CO (lb/event)	POC (lb/event)
Start-Up	120	41	20	2

21. Turbine Shutdown: The project owner shall operate the gas turbines so that the duration of a shutdown does not exceed 30 minutes per event, or other time period based on good engineering practice that has been approved in advance by the BAAQMD. (Basis: Cumulative increase)

22. Mass Emission Limits: The project owner shall operate the LECEF so that the mass emissions from the S1, S2, S3 & S4 Gas Turbines and S7, S8, S9, & S10 HRSGs do not exceed the daily and annual mass emission limits specified below. The project owner shall implement process computer data logging that includes running emission totals to demonstrate compliance with these limits so that no further calculations are required.

Mass Emission Limits (Including Gas Turbine Start-ups and Shutdowns)

Pollutant	Each Turbine/HRSG Power Train (lb/day)	All 4 Turbine/HRSG Power Trains (lb/day)	All 4 Turbine/HRSG Power Trains (ton/yr)
NOx (as NO_2)	175.6	702.4	94.1
POC	20.2	80.8	12.3
CO	97.0	388.0	53.4
SOx (as SO_2)			6.43
PM_{10}			38.5

VI. Permit Conditions

NH_3	104	416	56.9

The daily mass limits are based upon calendar day per the definitions section of the permit conditions. Compliance with the daily limits shall be based on one-hour readings through the use of process monitors (e.g., fuel use meters), CEMS, source test results, and the monitoring, recordkeeping and reporting conditions of this permit. If any part of a CEM or parametric monitor involved in the mass emission calculations is inoperative for more than a clock hour of plant operation, the mass data for the period of inoperation shall be calculated using a District-approved alternate calculation method. The annual mass limits are based upon a rolling 12 calendar month period. Compliance with the annual limits for NOx, POC, and CO shall be demonstrated in the same manner as for the daily limits. Compliance with the daily and annual emissions limits for POC from each gas turbine/HRSG train shall be calculated by multiplying turbine and HRSG fuel usage times an emission factor determined by source testing of the turbine/HRSG conducted in accordance with part 26. Compliance with the annual emissions limits for PM_{10} and SO_2 from each gas turbine/HRSG shall be calculated by multiplying turbine/HRSG fuel usage times an emission factor determined by source testing of the turbine/HRSG conducted in accordance with Part 26. The emission factor for each turbine shall be based on the average of the emissions rates observed during the 4 most recent source tests on that turbine/HRSG (or, prior to the completion of 4 source tests on a turbine/HRSG, on the average of the emission rates observed during all source tests on the turbine/HRSG). (Basis: cumulative increase, recordkeeping)

23. Sulfuric Acid Mist Limit: The project owner shall operate the LECEF so that the sulfuric acid mist emissions (SAM) from S1, S2, S3, S4, S7, S8, S9, and S10 combined do not exceed 7 tons totaled over any consecutive four quarters. (Basis: Regulation 2-2-306)

24. Operational Limits: In order to comply with the mass emission limits of this rule, the project owner shall operate the gas turbines and HRSGs so that they comply with the following operational limits:

    a. Heat input limits (Higher Heating Value):

	Each Gas Turbine w/o Duct Burner	Each Gas Turbine w/Duct Burner
Hourly:	500 MMbtu/hr	639 MMbtu/hr
Daily:	12,000 MMbtu/day	15,336 MMbtu/day
Four Turbine/HRSG Power Trains combined:		18,215,000 MMbtu/year

    b. Only PUC-Quality natural gas (General Order 58-a) shall be used to fire the gas turbines and HRSGs. The total sulfur content of the natural gas shall not exceed 1.0 gr/100 scf. To demonstrate compliance with this sulfur content limit, the owner/operator shall sample and analyze the gas from each supply source at least monthly to determine the sulfur content

VI. Permit Conditions

of the gas, in addition to any monitoring requirements specified in part 29. The owner/operator may obtain the data from each source of natural gas monthly. In this case, the data must be real data based on actual sulfur analyses performed by the supplier of natural gas and not assurances that the natural gas meets all specifications. If the owner/operator uses data obtained from the source of the natural gas, then the data must demonstrate that the sulfur content is below 1.0 gr/100 scf for each day of the month the facility is in operation. (Basis: BACT for SO_2 and PM_{10}.)

c. The owner/operator of the gas turbines and HRSGs shall demonstrate compliance with the daily and annual NOx and CO emission limits listed in part 22 by maintaining running mass emission totals based on CEM data. (Basis: Cumulative increase)

25. Monitoring Requirements: The owner/operator shall ensure that each gas turbine/HRSG power train complies with the following monitoring requirements:

a. The gas turbine/HRSG exhaust stack shall be equipped with permanent fixtures to enable the collection of stack gas samples consistent with EPA test methods.

b. The ammonia injection system shall be equipped with an operational ammonia flow meter accurate to plus or minus five percent at full scale, which shall be calibrated at least once every twelve months, and an injection pressure indicator.

c. The gas turbine/HRSG exhaust stacks shall be equipped with continuously recording emissions monitor(s) for NOx, CO and O_2. Continuous emissions monitors for CO shall comply with the requirements of 40 CFR Part 60, Appendices B and F. Continuous emissions monitors for NOx and O2 shall comply with the requirements of 40 CFR Part 75. All CO, NOx, and O2 monitors shall be capable of monitoring concentrations and mass emissions during normal operating conditions and during gas turbine startups and shutdowns.

d. The fuel heat input rate shall be continuously recorded using District-approved fuel flow meters along with quarterly fuel compositional analyses for the fuel's higher heating value (wet basis).

26. a. RATA: Within one hundred and twenty (120) days of the initial startup of the gas turbines and HRSGs, and at a minimum on an annual basis thereafter, the owner/operator shall perform a relative accuracy test audit (RATA) on the CO CEM in accordance with 40 CFR Part 60, Appendix B, Performance Specifications, and on the NOx and O2 CEMs in accordance with 40 CFR 75.

b. Source Testing: A source test shall be performed on an annual basis. Additional source testing may be required at the discretion of the District to address or ascertain compliance with the requirements of this permit. The written test results of the source tests shall be provided to the District within sixty days after testing. A complete test protocol shall be submitted 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 shall be provided so that a District observer may be present. The source test protocol shall comply with the following: measurements of NOx, CO, POC, and stack gas oxygen content shall be conducted in accordance with ARB

VI. Permit Conditions

Test Method 100; measurements of PM_{10} shall be conducted in accordance with ARB Test Method 5; and measurements of ammonia shall be conducted 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 initial and periodic source tests shall be conducted to show compliance with parts 19(a), 19(b), 19(c) and 19(d), and shall include those parameters specified in the approved test protocol, and shall at a minimum include the following:

a. NOx– ppmvd at 15% O2, lb/MMbtu, and lb/hr (as NO2)

b. Ammonia – ppmvd at 15% O2 (Exhaust)

c. CO – ppmvd at 15% O2, lb/MMbtu, and lb/hr (Exhaust)

d. POC – ppmvd at 15% O2, lb/MMbtu, and lb/hr (Exhaust)

e. PM_{10} – lb/hr (Exhaust)

f. SOx – lb/hr (based on sulfur content of fuel as measured by utility)

g. Natural gas consumption, fuel High Heating Value (HHV), and total fuel sulfur content

h. Turbine load in megawatts

i. Stack gas flow rate (DSCFM) calculated according to procedures in U.S. EPA Method 19

j. Exhaust gas temperature (°F)

k. Ammonia injection rate (lb/hr or moles/hr)

l. Water injection rate for each turbine at S1, S2, S3, & S4

(Basis: source test requirements & monitoring)

27. Within 120 days of start-up of the LECEF in combined-cycle configuration and on a semi-annual basis thereafter, the project owner shall conduct a District approved source test on exhaust points P1, P2, P3, and P4 while each Gas Turbine/HRSG power train is operating at maximum load to demonstrate compliance with the SAM emission limit specified in part 23. The results of the initial source test must be submitted within 165 days of startup. Subsequent source tests must be submitted within 60 days of the date of the source test. The owner/operator shall test for SO_3 evaluated as H2SO4 and sulfuric acid mist (SAM). After acquiring one year of source test data on these units, the owner/operator may petition the District to switch to annual source testing if test variability is acceptably low as determined by the District. (Basis: Regulation 2-2-306, SAM Periodic Monitoring)

28. The owner/operator shall prepare a written quality assurance program must be established in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60, Appendix F. (Basis: continuous emission monitoring)

29. deleted

30. The owner/operator shall notify the District of any breakdown condition consistent with the District's breakdown regulations. (Basis: Regulation 1-208)

VI. Permit Conditions

31. The owner/operator shall notify the District in writing in a timeframe consistent with the District's breakdown regulations following the correction of any breakdown condition. The breakdown condition shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the actions taken to restore normal operations. (Basis: Regulation 1-208)

32. Recordkeeping: The owner/operator shall maintain the following records. The format of the records is subject to District review and approval:

    a. hourly, daily, quarterly and annual 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 annual 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: evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any continuous emissions monitor

    (Basis: record keeping)

33. The owner/operator shall maintain all records required by this permit for a minimum period of five years from the date of entry and shall make such records readily available for District inspection upon request. (Basis: record keeping)

34. Reporting: The owner/operator shall submit to the District a written report for each calendar quarter, within 30 days of the end of the quarter, which shall include all of the following items:
    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, including zero and span checks, and the nature of system repairs and adjustments
    f. A negative declaration when no excess emissions occurred
    g. Results of quarterly fuel analyses for HHV and total sulfur content.

    (Basis: recordkeeping & reporting)

35. Emission Offsets: The project owner shall provide 23.35 tons of valid NOx emission reduction credits prior to the issuance of the Authority to Construct. The owner/operator shall deliver the ERC certificates to the District Engineering Division at least ten days prior to the issuance of the authority to construct. (Basis: Offsets)

VI. Permit Conditions

36. District Operating Permit: The owner/operator shall apply for and obtain all required operating permits from the District in accordance with the requirements of the District's rules and regulations. (Basis: Regulation 2, Rules 2 & 6)

37. Deleted

38. Deleted June 22, 2004.

39. The project owner shall not operate S5 Fire Pump Diesel Engine more than 50 hours per year for reliability-related activities. (Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3)or (e)(2)(B)(3), offsets).

40. The project owner shall operate S5 Fire Pump Diesel Engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, state or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating hours while mitigating emergency conditions or while emission testing to show compliance with District, state or Federal emission limits is not limited. (Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 9e)(2)(A)(3) or (e)(2)(B)(3)).

41. The project owner shall operate S5 Fire Pump Diesel Engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained. (Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(G)(1), cumulative increase).

42. Records: The project owner shall maintain the following monthly records in a District-approved log for at least 60 months from the date of entry. Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
    a. Hours of operation for reliability-related activities (maintenance and testing).
    b. Hours of operation for emission testing to show compliance with emission limits.
    c. Hours of operation (emergency).
    d. For each emergency, the nature of the emergency condition.
    e. Fuel usage for each engine(s). (Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(I), cumulative increase)

*43. The project owner shall operate the facility such that maximum calculated annual toxic air contaminant emissions (pursuant to part 45) from the gas turbines and HRSGs combined (S1, S2, S3, S4, S7, S8, S9, and S10) do not exceed the following limits:

6490 pounds of formaldehyde per year
3000 pounds of acetaldehyde per year
3.2 pounds of Specified polycyclic aromatic hydrocarbons (PAHs) per year
65.3 pounds of acrolein per year

unless the following requirement is satisfied:

VI. Permit Conditions

The project owner shall perform a health risk assessment using the emission rates determined by source test and the most current Bay Area Air Quality Management District approved procedures and unit risk factors in effect at the time of the analysis. This analysis shall be submitted to the District and the CEC CPM within 60 days of the source test date. The project owner may request that the District and CEC CPM revise the carcinogenic compound emission limits specified above. If the project owner demonstrates to the satisfaction of the APCO that these revised emission limits will result in a cancer risk of not more than 1.0 in one million, the District and CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. (Basis: Regulation 2, Rule 5)

44. To demonstrate compliance with Part 43, after each source test performed pursuant to part 43, the project owner shall calculate and record the maximum projected annual emissions for the compounds specified in part 43using the maximum heat input of 18,215,000 MMbtu/year and the highest emission factor (pound of pollutant per MMbtu) determined by any source test of the S1, S2, S3 & S4 Gas Turbines and S7, S8, S9, and S10 HRSGs. If this calculation method results in an unrealistic mass emission rate the applicant may use an alternate calculation, subject to District approval. (Basis: Regulation 2, Rule 5)

45. Within 120 days of initial start-up of the Los Esteros Critical Energy Facility and on a biennial (once every two years) basis thereafter, the project owner shall conduct a District-approved source test at exhaust point P1, P2, P3, or P4 while the Gas Turbines are at maximum allowable operating rates to demonstrate compliance with Part 44. The results of the initial source test must be submitted within 165 days of startup. Subsequent source tests must be submitted within 60 days of the date of the source test. If three consecutive biennial source tests demonstrate that the annual emission rates for any of the compounds listed above calculated pursuant to part 45 are less than the BAAQMD Toxic Risk Management Policy trigger levels shown below, then the owner/operator may discontinue future testing for that pollutant.

Formaldehyde	<	132 lb/yr
Acetaldehyde	<	288 lb/yr
Specified PAHs	<	0.18 lb/yr
Acrolein	<	15.6 lb/yr

(Basis: BAAQMD 2-1-316, Regulation 2, Rule 5)

46. The project owner shall properly install and maintain the cooling towers to minimize drift losses. The owner/operator shall equip the cooling towers with high-efficiency mist eliminators with a maximum guaranteed drift rate of 0.0005%. The maximum total dissolved solids (TDS) measured at the base of the cooling towers or at the point of return to the wastewater facility shall not be higher than 6,000 ppmw (mg/l). The project owner shall sample and test the cooling tower water at least once per day to verify compliance with this TDS limit. (Basis: cumulative increase; Regulation 2-1-319)

47. The owner/operator shall perform a visual inspection of the cooling tower drift eliminators at least once per calendar year, and repair or replace any drift eliminator components which are broken or missing. Prior to the initial operation of the combined-cycle Los Esteros Critical Energy Facility, the owner/operator shall have the cooling tower vendor's field representative inspect the cooling tower drift eliminators and certify that the installation was performed in

VI. Permit Conditions

accordance with the manufacturer's design and specifications. Within 60 days of the initial operation of the cooling tower, the owner/operator shall perform an initial performance source test to determine the PM_{10} emission rate from the cooling tower to verify compliance with the vendor-guaranteed drift rate specified in part 46. The CPM may, in years 5 and 15 of cooling tower operation, require the owner/operator to perform source tests to verify continued compliance with the vendor-guaranteed drift rate specified in part 46. (Basis: cumulative increase; Regulation 2-1-319)

48. S14 is a GE LM6000 turbine that is equivalent to the existing gas turbines and is used as a substitute when one of the existing turbines is being maintained. The owner/operator may substitute S14, Combustion Gas Turbine #5 into any of the four power trains at any time (S1/S7, S2/S8, S3/S9, and S4/S10). The owner/operator shall ensure that the power train operating with S14 complies with all permit conditions for that power train. The owner/operator shall operate no more than four turbines at any time. (Basis: Cumulative Increase)

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.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION,
S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.2	N		9 ppmv @ 15% O2, dry or 0.43 lbs/MW-hr	BAAQMD 9-9-501 and BAAQMD condition #23868, part 25c	C	CEM
NOx	SIP 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD condition #23868, part 25c	C	CEM
NOx	NSPS Subpart KKKK 40 CFR 60.4320(a) and (h)	Y		25 ppmv @ 15% O2, dry 30 day rolling average	NSPS 40 CFR 60.4335(b)(1)	C	CEM
NOx	None	Y		None	40 CFR 75.10	C	CEM

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx (as NO_2)	BAAQMD condition #23688, part 10	Y		1464 lb/day and 102 lb/hr for all turbines and HRSGs combined during commissioning, including startup and shutdown of turbine without catalyst	BAAQMD condition #23688, parts 7 and 25c	C	CEM
NOx (as NO_2)	BAAQMD condition #23688, part 10	Y		1464 lb/day and 61 lb/hr for all turbines and HRSGs combined during commissioning, including startup and shutdown of turbine with catalyst	BAAQMD condition #23688, parts 7 and 25c	C	CEM
NOx	BAAQMD condition #23688, part 19a	Y		2 ppmv @ 15% O2, dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, parts 19a and 25c	C	CEM
NOx	BAAQMD condition #23688, part 19a	Y		2 ppmv @ 15% O2, dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, part 26a	P/A	Source test
NOx (as NO_2)	BAAQMD condition #23688, part 22	Y		175.6 lb/day for each turbine/HRSG power train including startup and shutdown	BAAQMD condition #23688, part 25c	C	CEM
NOx (as NO_2)	BAAQMD condition #23688 part 22	Y		702.4 lb/day (as NO2) for all turbines and HRSGs combined, including startup and shutdown	BAAQMD condition #23688, part 25c	C	CEM
NOx (as NO_2)	BAAQMD condition #23688 part 22	Y		94.1 tons per year (as NO2) for all turbines and HRSGs combined, including startup or shutdown	BAAQMD condition #23688, part 25c	C	CEM

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD condition #23688 part 20	Y		41 lb/turbine/startup during startup not to exceed 120 minutes	BAAQMD condition #23688, part 25c	C	CEM
CO	BAAQMD condition #23688, part 10	Y		1056 lb/day and 88 lb/hr for all turbines and HRSGs combined during commissioning, including startup and shutdown of turbine without catalyst	BAAQMD condition #23688, parts 7 and 25c	C	CEM
CO	BAAQMD condition #23688, part 10	Y		984 lb/day and 41 lb/hr for all turbines and HRSGs combined during commissioning, including startup and shutdown of turbine with catalyst	BAAQMD condition #23688, parts 7 and 25c	C	CEM
CO	BAAQMD condition #23688, part 19c	Y		2 ppmv @ 15% O2, dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, parts 19c and 25c	C	CEM
CO	BAAQMD condition #23688, part 19c	Y		2 ppmv @ 15% O2, dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, part 26c	P/A	Source test
CO	BAAQMD condition #23688, part 19c	Y		2.85 lb CO/hr for each turbine, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, parts 19c and 25c	C	CEM
CO	BAAQMD condition #23688, part 19c	Y		2.85 lb CO/hr for each turbine, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, part 26c	P/A	Source test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD condition #23688, part 22	Y		97 lb/day for each turbine/HRSG power train including startup and shutdown	BAAQMD condition #23688, part 25c	C	CEM
CO	BAAQMD condition #23688, part 22	Y		388 lb/day for all turbines and HRSGs combined, including startup and shutdown	BAAQMD condition #23688, part 25c	C	CEM
CO	BAAQMD condition #23688, part 22	Y		53.4 tons per year for all turbines and HRSGs combined, including startup and shutdown	BAAQMD condition #23688, part 25c	C	CEM
CO_2		Y		None	40 CFR 75.10	C	CEM (CO2) or CEM (O2) or fuel flow monitor
CO	BAAQMD condition #23688 part 20	Y		20 lb/turbine/startup during startup not to exceed 120 minutes	BAAQMD condition #23688, part 25c	C	CEM
SO_2	BAAQMD 9-1-301	Y		GLC[1] of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD Condition 23868, Part 26f	P/A	Source test for flow and vendor sulfur data
SO_2	NSPS Subpart KKKK 40 CFR 60.4330(a)(2)	Y		0.060 lb SO2/MMbtu	NSPS 40 CFR 60.4365(a)	N	None

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO_2	None	Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measure-ments, calculations
SO2	BAAQMD condition #23688, part 22	Y		6.43 tons/calendar year for all turbines and HRSGs combined including startup and shutdown of turbines	BAAQMD Condition 23688, Part 26f	P/A	Source test test for flow and vendor sulfur data, calculations
S in fuel	BAAQMD condition #23688, part 24b	Y		1.0 gr S/100 scf natural gas	BAAQMD condition #23688, part 24b	P/M	Fuel analysis or vendor data
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	BAAQMD condition #23688, part 18	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour or equivalent 20% opacity		N	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N	
FP	SIP 6-310	Y		0.15 grain/dscf		N	
FP	BAAQMD 6-1-3103	N		0.15 grain/dscf @ 6% O2		N	
FP	SIP 6-310	Y		0.15 grain/dscf @ 6% O2		N	

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
PM_{10}	BAAQMD condition #23688 part 22	Y		38.5 tons/year for all turbines and HRSGs combined including startup and shutdown	BAAQMD condition #23688, part 26e	P/A	Source Test
POC	BAAQMD condition #23688 part 10	Y		288 lb/day for all turbines and HRSGs combined during commissioning and including startup and shutdown of turbines without catalyst	BAAQMD condition #23688 part 26d	P/A	Source Test, records & calculation
POC	BAAQMD condition #23688 part 10	Y		114 lb/day for all turbines and HRSGs combined during commissioning and including startup and shutdown of turbines with catalyst	BAAQMD condition #23688 part 26d	P/A	Source Test, records & calculation
POC	BAAQMD condition #23688, part 19d	Y		1 ppmv @ 15% O2, dry, 1-hr average except during turbine startup or shutdown	BAAQMD condition #23688, part 26d	P/A	Source Test
POC	BAAQMD condition #23688, part 22	Y		20.2 lb/day for each turbine/HRSG power train including startup and shutdown	BAAQMD condition #23688, part 26d	P/A	Source Test
POC	BAAQMD condition #23688, part 22	Y		80.8 lb/day for all turbines and HRSGs combined, including startup and shutdown	BAAQMD condition #23688, part 26d	P/A	Source Test
POC	BAAQMD condition #23688 part 22	Y		12.3 tons/year for all turbines and HRSGs combined including startup and shutdown.	BAAQMD condition #23688, part 26d	P/A	Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #23688 part 20	Y		2 lb/turbine/startup during startup not to exceed 120 minutes	BAAQMD condition #23688, part 25c	C	Source Test
NH_3	BAAQMD condition #23688, part 19b	N		5 ppmv @ 15% O2, dry, averaged over 3 hrs except during turbine startup or shutdown	BAAQMD condition #23688, parts 19b and 26b	C	Ammonia flow meter, calculations
NH_3	BAAQMD condition #23688, part 19b	N		5 ppmv @ 15% O2, dry, averaged over 3 hrs except during turbine startup or shutdown	BAAQMD condition #23688, part 26b	P/A	Source Test
NH_3	BAAQMD condition #23688, part 22	N		104 lb/day for each turbine/HRSG power train including startup and shutdown	BAAQMD condition #23688, part 25b	P/A	Ammonia flow meter, calculations
NH_3	BAAQMD condition #23688, part 22	N		416 lb/day for all turbines and HRSGs combined, including startup and shutdown	BAAQMD condition #23688, part 25b	P/A	Ammonia flow meter, calculations
NH_3	BAAQMD condition #23688 part 22	N		56.9 tons/year for all turbines and HRSGs combined including startup and shutdown.	BAAQMD condition #23688, part 26b	P/A	Ammonia flow meter, calculations
Formal-dehyde	BAAQMD condition #23688 part 43	N		6490 pounds/year for all turbines and HRSGS combined	BAAQMD condition #23688 parts 44 &45	P Startup and biennial thereafter	Source Test
Acetal-dehyde	BAAQMD condition #23688 part 43	N		3000 pounds/year for all turbines and HRSGS combined	BAAQMD condition #23688 parts 44 &45	P Startup and biennial thereafter	Source Test

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Specified PAH's	BAAQMD condition #23688 part 43	N		3.2 pounds/year for all turbines and HRSGS combined	BAAQMD condition #23688 parts 44 &45	P Startup and biennial thereafter	Source Test
Acrolein	BAAQMD condition #23688 part 43	N		65.3 pounds/year for all turbines and HRSGS combined	BAAQMD condition #23688 parts 44 &45	P Startup and biennial thereafter	Source Test
Sulfuric acid mist	BAAQMD condition #23688 part 23	Y		7 tons/yr for all turbines and HRSGs combined	BAAQMD condition #23688 part 27	P/SA (may be lowered after 2 tests based on variability)	Source test
Heat input limit	BAAQMD condition #23688, part 24	Y		500 MMbtu/hr (HHV), for each turbine	BAAQMD condition #23688, part 25d	C	Fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #23688, part 24	Y		500 MMbtu/hr (HHV), for each turbine	BAAQMD condition #23688, part 25d	P/M	Fuel composition analysis
Heat input limit	BAAQMD condition #23688, part 24	Y		500 MMbtu/hr (HHV), for each turbine	BAAQMD condition #23688, part 25d	P/A	Source test
Heat input limit	BAAQMD condition #23688, part 24	Y		639 MMbtu/hr (HHV), for each turbine w/ Duct Burner	BAAQMD condition #23688, part 25d	C	Fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #23688, part 24	Y		639 MMbtu/hr (HHV), for each turbine w/ Duct Burner	BAAQMD condition #23688, part 25d	P/M	Fuel composition analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Heat input limit	BAAQMD condition #23688, part 24	Y		639 MMbtu/hr (HHV), for each turbine w/ Duct Burner	BAAQMD condition #23688, part 25d	P/A	Source test
Heat input limit	BAAQMD condition #23688, part 24	Y		12,000 MMbtu/day (HHV) for each turbine	BAAQMD condition #23688, part 25d	C	fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #23688, part 24	Y		12,000 MMbtu/day (HHV) for each turbine	BAAQMD condition #23688, part 25d	P/Q	Fuel composition analysis
Heat input limit	BAAQMD condition #23688, part 24	Y		15,366 MMbtu/day (HHV) for each turbine w/ Duct Burner	BAAQMD condition #23688, part 25d	C	fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #23688, part 24	Y		15,366 MMbtu/day (HHV) for each turbine w/ Duct Burner	BAAQMD condition #23688, part 25d	P/Q	Fuel composition analysis
Heat input limit	BAAQMD condition #23688, part 24	Y		18,215,000 MMbtu/yr (HHV) for all turbines w/ Duct Burners	BAAQMD condition #23688, part 25d	C	fuel meter, firing monitor, calculations
Heat input limit	BAAQMD condition #23688, part 24	Y		18,215,000 MMbtu/yr (HHV) for all turbines w/ Duct Burners	BAAQMD condition #23688, part 25d	P/Q	Fuel composition analysis
Unabated firing	BAAQMD condition #23688, part 8	Y		250 hours during commissioning	BAAQMD condition #23688, part 8	P/H	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII - A
Applicable Limits and Compliance Monitoring Requirements
S1, S2, S3, S4, & S14 COMBUSTION GAS TURBINES WITH WATER INJECTION, S7, S8, S9, & S10 HEAT RECOVERY STEAM GENERATORS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
MW	N/A			None	BAAQMD condition #23688, part 26h	P/A	Source test
Gas temper-ature	N/A			None	BAAQMD condition #23688, part 26j	P/A	Source test
Stack gas flow	N/A			None	BAAQMD condition #23688, part 26i	P/A	Source test
NH_3 injection rate	N/A			None	BAAQMD condition #23688, part 26k	P/A	Source test
Water injection rate	N/A			None	BAAQMD condition #23688, part 26l	P/A	Source test
Shutdown	BAAQMD condition #23688, part 21	Y		Shutdown of turbine not to exceed 30 minutes per event		P	CEM

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S5 FIRE PUMP DIESEL ENGINE

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 6-1-303.1	N		>Ringelmann No.2 for no more than 3 minutes in any hour		N	
Opacity	SIP Regulation 6-303.1	Y		Ringelmann 2.0 for 3 minutes in any hour		N	
FP	BAAQMD 6-1-310	N		0.15 gr/dscf Particulate Weight Limitation		N	
FP	SIP Regulation 6-310	Y		0.15 gr/dscf		N	
SO_2	BAAQMD 9-1-301	Y		GLC[1] of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
SO_2	BAAQMD 9-1-304	Y		0.5% sulfur in fuel by weight		N	
Hours of operation	BAAQMD Regulation 9-8-330.1	N		Emergency use for an unlimited number of hours	BAAQMD Regulation 9-8-530	P	Records
Hours of operation	40 CFR Part 63, Subpart ZZZZ, 63.6640 (f)(1)(ii)	Y		Maintenance checks and readiness testing less than 100 hr/yr	40 CFR Part 63, Subpart ZZZZ, 63.6655(e)	P	Records
Hours of operation	BAAQMD Condition #23688, part 39	N		Reliability related activities less than 50 hr/yr	BAAQMD Condition #23688, parts 41 & 42	C P/E	Records
Hours of operation	CARB ATCM 93115.6(b)(3)	N		Reliability related activities less than 50 hr/yr	CARB ATCM 93115.10(d)(1)	C P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
ONE CELL COOLING TOWER
S11. SIX CELL 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 6-1-301	N		≥ Ringelmann No. 1 for no more than 3 minutes in any hour		N	
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N	
FP	SIP 6-310	Y		0.15 grain/dscf		N	
FP	BAAQMD 6-1-311	N		40 lb/hr		N	
FP	SIP 6-311	Y		40 lb/hr		N	
Drift Rate	BAAQMD condition #23688, part 46	N		0.0005% (applies to S11 only)	BAAQMD condition #23688, part 47	P Initial (5^{th} and 15^{th} Year if required by CPM)	Source Test
TDS	BAAQMD condition #23688, part 46	N		< 6,000 ppmw (applies to S11 only)	BAAQMD condition #23688, part 46	P/D	TDS Test

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 6-1-301 and SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-1-310 and SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or USEPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 6-1-311 and 6-311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or USEPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling
BAAQMD 9-1-304	Fuel Burning (Liquid Fuel Sulfur Limit)	Manual of Procedure, Volume III, Method 10, Determination of Sulfur in Fuel Oil
NSPS Subpart KKKK	**Standards of Performance for Stationary Combustion Turbines (7/6/06)**	
60.4320(a)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.4330(a)(2)	SO_2 Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
NSPS 40 CFR 60.8	40 CFR 60, Appendix A	EPA Method 7, Determination of Nitrogen Oxide Emissions from Stationary Sources EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
BAAQMD Cond# 23688 for S1, S2, S3 & S4 Combustion Gas Turbines		
part 19a	NOx Limit	ARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling, , EPA Method 7E or EPA Method 20
part 19b	NH3 Limit	Manual of Procedures, Volume IV, ST-1B, Ammonia, Integrated Sampling
part 19c	CO Limit	ARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling or EPA Method 10
part 19d	POC Limit	EPA Method 12, EPA Method 25 or EPA Method TO-12
part 19e	PM_{10} Limit	EPA Method 201A/202 or equivalent method

VIII. Test Methods

Table VIII
Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
part 19f	SOx Limit	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling or ASTM D-5504

IX. TITLE IV ACID RAIN PERMIT

Effective May 30, 2018 through May 29, 2023.

ISSUED TO:
Los Esteros Critical Energy Facility, LLC
800 Thomas Foon Chew Way
San Jose, CA 95134

PLANT SITE LOCATION:
800 Thomas Foon Chew Way
San Jose, CA 95134

ISSUED BY:

Signed by Damian Breen for Jack P. Broadbent — May 30, 2018
Jack P. Broadbent, Executive Officer/APCO — Date

Type of Facility: **Combined-Cycle Natural Gas Fired Facility**
Primary SIC: **4911**
Product: **Electricity**

DESIGNATED REPRESENTATIVE
Name: Terry Mahoney
Title: General Manager
Phone: (408) 361-4928

FACILITY CONTACT PERSON:
Name: Rosemary Silva
Title: EHS Specialist
Phone: (408) 361-4954

IX. Title IV Acid Rain Permit

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 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 the 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

None of the sources at the facility (S-1 through S-8) are entitled to any SO_2 allowances under Table 2 of 40 CFR Part 73 for the term of this permit.

3) COMMENTS, NOTES AND JUSTIFICATIONS

Pursuant to 40 CFR Part 72.6 (a)(3)(i), each of S1, S2, S3, and S4, Gas Turbines, and S7, S8, S9, and S10, HRSGs, is considered a new utility unit and is subject to the acid rain permit requirements of 72.9(a).

S1, S2, S3, and S4, Gas Turbines, and S7, S8, S9, and S10, HRSGs, are not listed in table-2 of 40 CFR Part 73, therefore, SO2 allowances are not specified in the table for this plant.

S1, S2, S3, and S4, Gas Turbines, and S7, S8, S9, and S10, HRSGs, do not qualify for new unit exemptions pursuant to 40 CFR 72.7(b)(1) since each turbine and HRSG serves a generator with a nameplate capacity greater than 25 MW.

4) PERMIT REQUIREMENTS

The owners and operators of the facility must comply with the standard requirements and special provisions set forth in the facility's Title IV permit application, which is

IX. Title IV Acid Rain Permit

set forth in Section XIII. The main provisions of the regulations for natural gas fired acid rain sources, such as the ones at this facility, are the requirement to obtain one SO_2 allowance for each ton of SO_2 that is emitted, stringent monitoring requirements for NO_x, CO_2, and SO_2, and stringent recordkeeping and reporting requirements. Additional acid-rain-related permit requirements are stated in Standard Condition L in Section I of this permit.

IX. Title IV Acid Rain Permit

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☐ Revised ☒ for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Los Esteros Critical Energy Facility, LLC Facility (Source) Name	California State	55748 Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CTG 1	Yes
CTG 2	Yes
CTG 3	Yes
CTG 4	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

EPA Form 7610-16 (Revised 7-2014)

IX. Title IV Acid Rain Permit

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 source or unit, as appropriate, 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 source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; 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).

EPA Form 7610-16 (Revised 7-2014)

IX. Title IV Acid Rain Permit

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(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.

Nitrogen Oxides Requirements

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 source 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 source 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

IX. Title IV Acid Rain Permit

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

(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.
(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.
(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 CFR 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

IX. Title IV Acid Rain Permit

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source 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.

STEP 4
Read the certification statement, sign, and date.

Certification

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.

Name: Robert Parker	
Signature: 	Date: 12/5/16

EPA Form 7610-16 (Revised 7-2014)

X. PERMIT SHIELD

A. Non-applicable Requirements

None

B. Subsumed Requirements:

None

XI. REVISION HISTORY

Date	Action	Details
June 10, 2004	Final Permit	Application 7136
June 6, 2012	Permit Renewal	Application 19302 – Title V Permit Renewal
June 6, 2012	Significant Revision	Application 23956-Revisions associated with the Phase II Conversion project to change the LECEF from a simple cycle to a combined cycle plant
May 19, 2015	Minor Revision	Applications 24976, 25872
May 30, 2018	Renewal	Application 28412

XII. 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 allows 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.

XII. Glossary

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 E 6 equals (4.53) x (10^6) = (4.53) x (10 x 10 x 10 x 10 x 10 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.

XII. Glossary

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.

HRSG
Heat Recovery Steam Generator

H2S
Hydrogen Sulfide

LECEP
Los Esteros Critical Energy Facility

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.

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.

XII. Glossary

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.

OC, 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).

SAM
Sulfuric Acid Mist

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 units

XII. Glossary

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

Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to