



APR 30 2012

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Notice of Minor Title V Permit Modification**
District Facility # C-722
Project # C-1120911

Dear Mr. Rios:

Enclosed for you to review is an application for minor Title V permit modification for the facility identified above. KES-Kingsburg is proposing a Title V minor permit modification to modify Permit(s) to Operate (PTOs) C-722-2-12 of the facility's current Title V operating permit. Facility is proposing a Title V minor permit modification to incorporate the Acid Rain requirements and reconcile overlap between Part 60 and Part 75 monitoring requirements into the Title V operating permit.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V PTO(s) C-722-2-15, application, and previous Title V permit. Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Enclosures
cc: Kamaljit Sran, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



APR 30 2012

Joel LePoutre
KES-Kingsburg
P.O. Box 217
Kingsburg, CA 93631

**Re: Notice of Minor Title V Permit Modification
District Facility # C-722
Project # C-1120911**

Dear Mr. LePoutre:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to modify Permit(s) to Operate C-722-2-12 of the current Title V operating permit. Facility is proposing a Title V minor permit modification to incorporate the Acid Rain requirements and reconcile overlap between Part 60 and Part 75 monitoring requirements into the Title V operating permit.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V PTO(s) C-722-2-15, application, and previous Title V permit. This project will be finalized after the 45-day EPA comment period.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-5900.

Sincerely,

David Warner
David Warner
Director of Permit Services

Enclosures
cc: Karnaljit Sran, Permit Services

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TITLE V APPLICATION REVIEW

Minor Modification
Project #: C-1120911

Engineer: Kamaljit Sran
Date: April 18, 2012

Facility Number: C-722
Facility Name: KES-Kingsburg L.P.
Mailing Address: P.O. Box 217
Kingsburg, CA 93631

Contact Name: Joel LePoutre
Phone: (559) 891-1089

Responsible Official: Joel LePoutre
Title: Asset Manager

I. PROPOSAL

KES-Kingsburg L.P. is proposing a Title V minor permit modification to incorporate the Acid Rain requirements and reconcile overlap between Part 60 and Part 75 monitoring requirements into the Title V operating permit. Facility has operated a 34.5 MW cogeneration plant since 1991. A 23.1 MW natural gas-fired, steam-injected General Electric LM2500 combustion gas turbine drives an electrical generator while a fired heat recovery steam generator (HRSG) produces high-pressure steam that further drives a steam turbine generator. The combustion gas turbine originally was not an affected unit under the Acid Rain Program because the Facility met the "qualifying facility" (QF) criteria pursuant to 40 CFR 72.2 and the combustion gas turbine was therefore exempt from the Acid Rain Program pursuant to 40 CFR 72.6(b)(5). On December 1, 2011, Facility began operating under a new power purchase agreement with the PG&E and lost its QF status, thus becoming a "newly affected facility" under the Acid Rain Program pursuant to 40 CFR 72.6(a)(3)(v).

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

The facility is located at 11765 Mountain View Avenue in Kingsburg in Fresno County, CA

III. EQUIPMENT DESCRIPTION

C-722-2-15: 34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH A NATURAL GAS-FIRED 110 MMBTU/HR DAVIS DUCT BURNER, SELECTIVE CATALYTIC REDUCTION, AND A HEAT RECOVERY STEAM GENERATOR UNIT

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

40 CFR 72.9(b)(1) requires an operator of an affected unit to comply with the monitoring requirements of 40 CFR 75. 40 CFR 75.10 further requires an operator to measure SO₂/NO_x/CO₂ emissions and heat input rate from an affected unit. While Part 75 contains specific requirements for continuous emission monitoring (CEMS) of SO₂/NO_x/CO₂ emissions, Part 75 does contain exceptions for SO₂ and CO₂ monitoring for gas-fired combustion turbines.

Facility proposes to comply with the Acid Rain monitoring requirements outlined below.

- Has submitted to USEPA an initial Acid Rain Monitoring Plan (and revisions, as appropriate) pursuant to 40 CFR 75.62.
- Has developed a Quality Assurance/Quality Control program pursuant to Appendix B of Part 75.
- Has submitted to USEPA and the District an Initial Certification Application for the Acid Rain monitoring systems.
- For heat input monitoring, Facility will:
 - Use Equation F-20 of Appendix F of Part 75 and records of gross calorific value (GCV) and hourly fuel flow rate to estimate the hourly heat input rate;
 - Measure natural gas consumption separately for the gas turbine and duct burner using certified fuel meters and will record the resulting data with a data acquisition and handling system (DAHS);

- Determine the GCV of the natural gas monthly using the methods listed in Section 2.3.4 of Appendix D of Part 75;
 - Perform a flow meter accuracy test, as part of the initial certification procedures, on each fuel flow meter to verify the fuel flow meters meet the accuracy specifications of Appendix D of Part 75; and
 - Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly fuel flow rates, heat input rates, and missing data substitution procedures of Appendix D of Part 75.
- For SO_x monitoring, Facility will:
 - Use Equation D-5 of Appendix D of Part 75, an SO₂ emission factor of 0.0006 lb/MMBtu, and records of hourly heat input rate to estimate hourly SO₂ emissions;
 - Use Equation F-3 of Appendix F of Part 75 to calculate the quarterly SO₂ emissions;
 - Use Equation F-4 of Appendix F of Part 75 to calculate the annual SO₂ emissions;
 - Sample the natural gas sulfur content annually to demonstrate that the fuel sulfur content does not exceed 0.5 gr/100 scf; and
 - Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly/quarterly/annual SO₂ emissions and missing data substitution procedures of Appendix D of Part 75.
 - For NO_x monitoring, Facility will:
 - Certify and operate the existing NO_x and O₂ CEMS, in accordance with Part 75, with a DAHS for measuring and recording NO_x concentration (in ppm), O₂ concentration (in %), and NO_x emission rate (in lb/MMBtu).
 - Maintain the NO_x and O₂ CEMS, in accordance with Appendix B of Part 75, including:
 - Daily calibration error tests (using EPA Protocol Gases) and adjustments;
 - Quarterly linearity checks; and
 - Semi-annual (or annual, as allowed) relative accuracy test audits (RATAs) (using "Air Emissions Test Bodies") and bias adjustments.
 - Use Equation F-5 of Appendix F of Part 75, a natural gas F-factor of 8,710 scf/MMBtu, and records of hourly NO_x and O₂ concentration to estimate hourly NO_x emission rates (in lb/MMBtu).
 - Use Equation F-9 of Appendix F of Part 75 to calculate the quarterly average NO_x emission rates (in lb/MMBtu).
 - Use Equation F-10 of Appendix F of Part 75 to calculate the annual average NO_x emission rates (in lb/MMBtu).
 - Perform an initial certification test according to the procedures of

- Appendix A of Part 75 on the NO_x/O₂ CEMS to verify the CEMS meet the accuracy specifications of Appendix A of Part 75, including:
- 7-day calibration error tests,
 - Linearity checks,
 - RATAs,
 - Bias tests, and
 - Cycle time test.
- Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly NO_x/O₂ average concentrations, hourly/quarterly/annual average NO_x emission rates (in lb/MMBtu), and missing data substitution procedures of Subpart D of Part 75.
- For CO₂ monitoring, Facility will:
 - Use Equation G-4 of Appendix G of Part 75, a natural gas CO₂ F-factor of 1,040 scf/MMBtu, and records of hourly heat input rate to estimate hourly CO₂ emissions;
 - Use Equation F-12 of Appendix F of Part 75 to calculate the quarterly CO₂ emissions; and
 - Use Equation F-13 of Appendix F of Part 75 to calculate the annual CO₂ emissions.

Streamlining of the overlapping requirements for Part 60 and Part 75.

40 CFR Part 60, Subpart GG establishes the New Source Performance Standards (NSPS) for stationary gas turbines, rated not less than 10 MMBtu/hr (at lower heating value, or LHV), which commenced construction, reconstruction, or modification after October 1977 (but prior to February 2005). Since the combustion gas turbine was constructed in 1991 and has not been modified or reconstructed (as defined in Part 60) since February 2005, it is an affected "facility" under Subpart GG. Pursuant to 40 CFR 60.334(b)(1), Subpart GG requires a CEMS installed for Subpart GG monitoring to be certified according to Performance Specifications 2 (for NO_x) and 3 (for O₂) of Appendix B to Part 60.

Condition #8 of PTO #C-722-2-12 specifies a NO_x limit of 5.0 ppmv @ 15% O₂ for the gas turbine; Condition #8 cites District Rule 2201 (New and Modified Stationary Source Review, or NSR) and District Rule 4703 (Stationary Gas Turbines) as the regulatory authority for this emission limit. Condition #8 is more stringent than the Subpart GG NO_x emission limit of approximately 75 ppmv @ 15% O₂ specified in 40 CFR 60.332(a)(1) and, as such, has subsumed the Subpart GG NO_x emission limit in the PTO.

Condition #16 of PTO #C-722-2-12 requires facility to operate and maintain NO_x/O₂ CEMS; Condition # 16 cites District Rule 4703 (Stationary Gas Turbines)

as the regulatory authority for this requirement. Though not cited, District NSR may also have served as the regulatory authority for this CEMS monitoring requirement. Condition #21 requires the NO_x/O₂ CEMS to meet the performance specifications of 40 CFR 60, Appendices B and F. Condition #23 further requires Facility to comply with the quality assurance (QA) testing and maintenance requirements of 40 CFR Part 60, Appendix F for the NO_x/O₂ CEMS. Therefore, the gas turbine is a Part 60 unit (subject to Subpart GG to the extent that NSR or Rule 4703 requirements have not subsumed Part 60 requirements) and is equipped with a Part 60 CEMS.

As noted above, 40 CFR 72.9(b)(1) requires the operator of an Acid Rain affected source to comply with the monitoring requirements of 40 CFR Part 75. 40 CFR 75.10(a)(2) requires an operator to install, certify, operate, and maintain a NO_x/O₂ CEMS with a DAHS for measuring and recording NO_x concentration (in ppm), O₂ concentration (in %) and NO_x emission rate (in lb/MMBtu). 40 CFR 75.10(b) requires an operator to install a NO_x/O₂ CEMS meeting the performance specifications in Appendix A to Part 75 and to maintain the CEMS in accordance with the QA and quality control procedures specified in Appendix B to Part 75.

Part 75 contains different QA requirements for NO_x/O₂ CEMS than does Part 60. These separate QA requirements occasionally overlap or contradict each other (e.g., whether QA needs to be performed while the unit is operating or whether quarterly QA needs to be performed). Simply adding the NO_x/O₂ monitoring requirements of Part 75 to the current PTO would require facility to operate its CEMS to meet the overlapping and contradictory requirements of Part 60 and Part 75 because, as noted above, Condition #21 of the PTO specifically requires the NO_x/O₂ CEMS to meet the performance specifications of Appendices B/F of Part 60. These overlapping and contradictory requirements can create confusion for operators, thus increasing the likelihood of monitoring deviations associated with QA requirements.

However, 40 CFR 60.334(b)(2)(iii) allows an operator who has installed a Part 75 NO_x/O₂ CEMS (and is meeting the ongoing requirements of Part 75) to use the Part 75 CEMS to meet the CEMS monitoring requirements of Subpart GG. The Part 75 missing data substitution methodology is not used to identify excess emissions for the purposes of Subpart GG. Instead, periods of missing CEMS data are still reported as monitor downtime in the District's Quarterly CEMS Report, which also serves as a Part 60 Excess Emissions and Monitor Performance Report required by 40 CFR 60.7(c-d).

Proposed Permit Conditions

Facility proposes the changes shown below, in underline/strikeout format, to the permit conditions for PTO #C-722-2-15 to incorporate the requirements of the

Acid Rain program and to eliminate the overlap/contradictions between Parts 60 and 75.

16. ~~Permittee shall install, operate, and maintain in calibration a system that continuously measures and records the exhaust gas NO_x and O₂ concentrations. The NO_x and O₂ GEMS shall meet EPA requirements as specified in 40 GPR Part 60 or other systems acceptable to the EPA. The owner or operator shall certify, maintain, operate and quality-assure a CEMS that continuously measures and records the exhaust gas NO_x and O₂ concentrations. A NO_x/O₂ CEMS meeting the requirements of 40 CFR 75 shall be used to meet the requirements 40 CFR 60.334. However, the missing data substitution methodology provided for in 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the Quarterly CEMS Report required by Rule 1080. [40 CFR 60.334(b)(2)(iii) and, District Rules 2520, 9.3.2, 4102, and 4703, 6.2.1 & 6.2.3] Federally Enforceable Through Title V Permit~~
21. ~~All CEMS shall meet the performance specification requirements in 40 CFR 75, Appendix A (including thermal stabilization periods) in 40 CFR 60 Appendix F, 40 CFR 51 Appendix P, and Part 60 Appendix S, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 75.10(b) and District Rules 1080, 6.5-6.6 and 2520, 9.3.2] Federally Enforceable Through Title V Permit~~
24. ~~Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS in accordance with the procedures and guidance specified in 40 CFR 75 60 Appendix B~~F~~. [40 CFR 75.10(b) and District Rules 2520, 9.3.2 and 4703, 6.2.3] Federally Enforceable Through Title V Permit~~
32. ~~The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry) and the natural gas sulfur content. EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. ASTM D1072-06, ASTM D4468-85 (Reapproved 2006), ASTM D5504-01, ASTM D6667-04, ASTM D3246-96, or any other method allowed by 40 CFR 75 Appendix D shall be used to determine the sulfur content of the natural gas. [40 CFR 60.8(a), 40 CFR 60.335, 40 CFR 75, Appendix D. 2.3.3.1.2, and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit~~
30. ~~The HHV and LHV GCV of the fuel combusted natural gas shall be determined monthly using ASTM D3588-98, ASTM 1826-94 (reapproved~~

in 1998), or ~~A8TM 1945~~ ASTM D4891-89 (Reapproved 2006), GPA Standard 2172-96. The Gross Heating Value, Relative Density, and Compressibility Factor for Natural Gas Mixtures shall be calculated from Compositional Analysis GPA Standard 2261-00, Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography, or any other method allowed by 40 CFR 75 Appendix D. [40 CFR Part 75, Appendix D, ~~2.3.4 District Rule 4703, 6.4.5~~] Federally Enforceable Through Title V Permit

45. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
46. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
47. The owners and operators of each source and each affected unit at the source shall hold allowances. as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of SO₂, for the previous calendar year from the unit. [40 CFR 72] Federally Enforceable Through Title V Permit
48. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
49. An allowance shall not be deducted in order to comply with the requirements of 40 CFR Part 72, prior to the calendar year for which the allowance was allocated. [40 CFR 72] Federally Enforceable Through Title V Permit
50. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit SO₂ in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance allocated by the Administrator under the Acid Rain Program

- does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of each affected unit at the source shall keep and make readily available upon request, for a period of five years from the date the document is created, the Certificate of Representation for the Designated Representative for the source and all documents that demonstrate the truth of the statements in the Certificate of Representation, in accordance with 40 CFR 72.24. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority provided that the certificate and document shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new Certificate of Representation changing the Designated Representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep and make readily available upon request each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR Part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
56. 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 75 Subpart I. [40 CFR 72] Federally Enforceable Through Title V Permit

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

- A. Proposed Modified Title V Operating Permit No. C-722-2-15
- B. Emissions Increases
- C. Application
- D. Existing Title V Operating Permit No. C-722-2-12

ATTACHMENT A

Proposed Modified Title V Operating Permit No.
C-722-2-15

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-2-15

EXPIRATION DATE: 04/30/2016

SECTION: 10 TOWNSHIP: 16S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH A NATURAL GAS-FIRED 110 MMBTU/HR DAVIS DUCT BURNER, SELECTIVE CATALYTIC REDUCTION, AND A HEAT RECOVERY STEAM GENERATOR UNIT: ADD ACID RAIN REQUIREMENTS.

PERMIT UNIT REQUIREMENTS

1. Permit units C-722-2 and C-722-1 shall not operate simultaneously. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The gas turbine shall incorporate a 200 hp electric motor as starter engine, a fuel control module to regulate the fuel rate based on exhaust temperature and fuel output, and a steam injection system with metering and recording devices. [District NSR Rule] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule, 40 CFR 60.333(b) and 60.334; County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
4. The gas turbine natural gas fuel consumption rate shall not exceed 6,480 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The duct burner natural gas fuel consumption rate shall not exceed 2,300 MMBtu per day [District Rule] Federally Enforceable Through Title V Permit
6. Permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 5.0 ppmvd NOx @ 15% O2 (based on a 3-hour rolling average with at least one sample point per 15-minute interval), 0.0029 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, 34 ppmv CO @ 15% O2, 0.023 lb-VOC/MMBtu, or 15 ppmv-ammonia @ 15% O2. [40 CFR 60.332, District NSR Rule; District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
9. During start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 0.0029 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, 0.023 lb-VOC/MMBtu. [District NSR Rule; and District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
10. Daily emissions from the gas turbine/duct burner/HRSG unit shall not exceed any of the following (including thermal stabilization periods): 149.1 lb-NOx/day, 23.4 lb-SOx/day, 37.0 lb-PM10/day, 503.7 lb-CO/day, or 147.6 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

11. The ammonia concentration shall not exceed 15 ppmv at 15% O₂. The ammonia concentration limits shall not apply during startup, which is not to exceed four hours, or shutdown, which is not to exceed two hours. [District Rule 4102]
12. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd across the catalyst corrected to 15% O₂ after performing (inlet - outlet) subtraction, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
13. {2257} Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
14. {2264} Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
15. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703, 5.3] Federally Enforceable Through Title V Permit
16. The owner or operator shall certify, maintain, operate and quality-assure a CEMS that continuously measures and records the exhaust gas NO_x and O₂ concentrations. A NO_x/O₂ CEMS meeting the requirements of 40 CFR 75 shall be used to meet the requirements 40 CFR 60.334. However, the missing data substitution methodology provided for in 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions, Instead, periods of missing CEMS data are to be reported as monitor downtime in the Quarterly CEMS Report required by Rule 1080. [40 CFR 60.334(b)(2)(iii) and District Rule 4703, 6.2.1 & 6.2.3] Federally Enforceable Through Title V Permit
17. The Continuous Emissions Monitoring equipment must be linked to a data logger which is compatible with the District's Data Acquisition System. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. All CEM systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [District Rule 2520, 9.3.2 and 40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
19. Emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with the applicable test method, or, for continuous emission monitoring data, all applicable requirements of 40 CFR 60. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rules 1080, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. All CEMS shall meet the performance specification requirements in 40 CFR 75. Appendix A. [40 CFR 75.10(b) and District Rule 1080, 6.5-6.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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22. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rules 1080, 7.1 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
23. Results of CEM systems shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2 and 2520, 9.3.2 and 60.13(h)] Federally Enforceable Through Title V Permit
24. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS in accordance with the procedures and guidance specified in 40 CFR 75 Appendix B. [40 CFR 75.10(b) and District Rule 4703, 6.2.3] Federally Enforceable Through Title V Permit
25. Permittee shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: 1) time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 2) averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; 3) applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and 5) a negative declaration when no excess emissions occurred. [40 CFR 60.7(c) and 60.334 and District Rules 1080, 8.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
26. A violation of the NO_x emission standard during a three hour averaging period indicated by the CEM system shall be reported to the APCO within 96 hours. [District Rules 1080, 9.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
27. {2254} APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
28. {2255} The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
29. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335, and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
30. The GCV of the natural gas shall be determined monthly using ASTM D3588-98, ASTM 1826-94 (reapproved in 1998), ASTM D4891-89 (Reapproved 2006), GPA Standard 2172-96. The Gross Heating Value, Relative Density, and Compressibility Factor for Natural Gas Mixtures shall be calculated from Compositional Analysis GPA Standard 2261-00, Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography, or any other method allowed by 40 CFR 75 Appendix D. [40 CFR Part 75, Appendix D, 2.3.4] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry) and the natural gas sulfur content. EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. ASTM D1072-06, ASTM D4468-85 (Reapproved 2006), ASTM D5504-01, ASTM D6667-04, ASTM D3246-96, or any other method allowed by 40 CFR 75 Appendix D shall be used to determine the sulfur content of the natural gas. [40 CFR 60.8(a), 40 CFR 60.335, 40 CFR 75, Appendix D, 2.3.3.1.2, and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit
33. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rule 4102]
34. Source testing to measure the VOC emission rates (lb/hr and ppmvd @ 15% O₂) shall be conducted every twelve months. [District Rule 1081 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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35. Source testing to measure the PM10 emission rate (lb/MMBtu) and the ammonia emission rate (ppmv @ 15% O2) shall be conducted once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Source testing to measure volatile organic compounds (VOC) shall be conducted using EPA Method 18 or 25. [District Rule 1081] Federally Enforceable Through Title V Permit
37. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
38. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rule 4102]
39. Permittee shall maintain records of the following: 1) the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the permit unit; 2) performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS; and 3) emission measurements. [District Rules 1080, 7.3, 2520, 9.4.2, 4703, 6.2.8, and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
40. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.4.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit
41. {2280} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i), and (j), and 60.335 (b), and (c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
44. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: 40 CFR 60.42b, 43b, 44b, 46b, 48b, and 49b. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
46. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
47. The owners and operators of each source and each affected unit at the source shall hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of SO2, for the previous calendar year from the unit. [40 CFR 72] Federally Enforceable Through Title V Permit
48. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
49. An allowance shall not be deducted in order to comply with the requirements of 40 CFR Part 72, prior to the calendar year for which the allowance was allocated. [40 CFR 72] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

50. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit SO₂ in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
51. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of each affected unit at the source shall keep and make readily available upon request, for a period of five years from the date the document is created, the Certificate of Representation for the Designated Representative for the source and all documents that demonstrate the truth of the statements in the Certificate of Representation, in accordance with 40 CFR 72.24. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority provided that the certificate and document shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new Certificate of Representation changing the Designated Representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep and make readily available upon request each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR Part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
56. 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 75 Subpart I. [40 CFR 72] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

DRAFT

ATTACHMENT B

Emissions Increases

There is no emission increase associated with the proposed modification.

ATTACHMENT C

Application

RECEIVED

APR 09 2012

Permits Srvc
SJVAPCD

March 29, 2012

Mr. Jim Swaney
Permit Services Manager
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244

Subject: Authority to Construct Application
KES Kingsburg LP
Modifications to Implement Acid Rain Monitoring Requirements

Dear Mr. Swaney:

KES Kingsburg LP (Kingsburg) is submitting to the San Joaquin Valley Air Pollution Control District (District) the attached Authority to Construct (ATC) and Acid Rain permit applications to implement the monitoring requirements of the Acid Rain Program into the Permit to Operate (PTO) for the Kingsburg Cogeneration Facility located in Kingsburg, California. The District's ATC Application Form, the District's Title V Application Form, and the U.S. Environmental Protection Agency's (EPA's) Acid Rain Permit Application Form are included in Attachment 1. We have enclosed a check for \$71 for the ATC Application filing fees, pursuant to Rule 3010 (Permit Fee).

Background

Kingsburg has operated a 34.5 MW cogeneration plant (Facility ID #C-722) since 1991. A 23.1 MW natural gas-fired, steam-injected General Electric LM2500 combustion gas turbine drives an electrical generator while a fired heat recovery steam generator (HRSG) produces high-pressure steam that further drives a steam turbine generator. A 110 MMBtu/hr natural gas fired Davis duct burner provides supplemental heat to the HRSG, as needed. Kingsburg historically provided electricity to the Sun-Maid Growers of California (Sun-Maid) and sold the remainder of its generated electricity to Pacific Gas & Electric Company (PG&E). Kingsburg also sold low-pressure steam from the steam turbine to Sun-Maid to provide process steam for Sun-Maid's raisin processing operations.

The combustion gas turbine originally was not an affected unit under the Acid Rain Program because the Facility met the "qualifying facility" (QF) criteria pursuant to 40 CFR 72.2 and the combustion gas turbine was therefore exempt from the Acid Rain Program pursuant to 40 CFR 72.6(b)(5). On December 1, 2011, Kingsburg began operating under a new power purchase agreement with the PG&E and lost its QF status, thus becoming a "newly affected facility" under the Acid Rain Program pursuant to 40 CFR 72.6(a)(3)(v). In accordance with 40 CFR 75.61(a)(2), Kingsburg, in a letter

dated December 14, 2011, notified EPA and the District that the Facility is subject to the Acid Rain Program. The owner of a newly affected unit must comply with the Acid Rain monitoring requirements of 40 CFR Part 75 within 180 days of becoming a newly affected unit. This deadline is May 29, 2012, for Kingsburg. The purpose of this application is to incorporate the Acid Rain requirements into the PTO and reconcile overlap between Part 60 and Part 75 monitoring requirements.

Acid Rain Compliance Monitoring

40 CFR 72.9(b)(1) requires an operator of an affected unit to comply with the monitoring requirements of 40 CFR 75. 40 CFR 75.10 further requires an operator to measure SO₂/NO_x/CO₂ emissions and heat input rate from an affected unit. While Part 75 contains specific requirements for continuous emission monitoring (CEMS) of SO₂/NO_x/CO₂ emissions, Part 75 does contain exceptions for SO₂ and CO₂ monitoring for gas-fired combustion turbines.

Kingsburg proposes to comply with the Acid Rain monitoring requirements outlined below.

- Kingsburg will submit to USEPA an initial Acid Rain Monitoring Plan (and revisions, as appropriate) pursuant to 40 CFR 75.62.
- Kingsburg will develop a Quality Assurance/Quality Control program pursuant to Appendix B of Part 75.
- Kingsburg will submit to USEPA and the District an Initial Certification Application for the Acid Rain monitoring systems.
- For heat input monitoring, Kingsburg will:
 - Use Equation F-20 of Appendix F of Part 75 and records of gross calorific value (GCV) and hourly fuel flowrate to estimate the hourly heat input rate;
 - Measure natural gas consumption separately for the gas turbine and duct burner using certified fuel meters and will record the resulting data with a data acquisition and handling system (DAHS);
 - Determine the GCV of the natural gas monthly using the methods listed in Section 2.3.4 of Appendix D of Part 75;
 - Perform a flowmeter accuracy test, as part of the initial certification procedures, on each fuel flowmeter to verify the fuel flowmeters meet the accuracy specifications of Appendix D of Part 75; and
 - Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly fuel flowrates, heat input rates, and missing data substitution procedures of Appendix D of Part 75.
- For SO_x monitoring, Kingsburg will:
 - Use Equation D-5 of Appendix D of Part 75, an SO₂ emission factor of 0.0006 lb/MMBtu, and records of hourly heat input rate to estimate hourly SO₂ emissions;

- Use Equation F-3 of Appendix F of Part 75 to calculate the quarterly SO₂ emissions;
- Use Equation F-4 of Appendix F of Part 75 to calculate the annual SO₂ emissions;
- Sample the natural gas sulfur content annually to demonstrate that the fuel sulfur content does not exceed 0.5 gr/100 scf; and
- Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly/quarterly/annual SO₂ emissions and missing data substitution procedures of Appendix D of Part 75.

- For NO_x monitoring, Kingsburg will:
 - Certify and operate the existing NO_x and O₂ CEMS, in accordance with Part 75, with a DAHS for measuring and recording NO_x concentration (in ppm), O₂ concentration (in %), and NO_x emission rate (in lb/MMBtu).
 - Maintain the NO_x and O₂ CEMS, in accordance with Appendix B of Part 75, including:
 - Daily calibration error tests (using EPA Protocol Gases) and adjustments;
 - Quarterly linearity checks; and
 - Semi-annual (or annual, as allowed) relative accuracy test audits (RATAs) (using "Air Emissions Test Bodies") and bias adjustments.
 - Use Equation F-5 of Appendix F of Part 75, a natural gas F-factor of 8,710 scf/MMBtu, and records of hourly NO_x and O₂ concentration to estimate hourly NO_x emission rates (in lb/MMBtu).
 - Use Equation F-9 of Appendix F of Part 75 to calculate the quarterly average NO_x emission rates (in lb/MMBtu).
 - Use Equation F-10 of Appendix F of Part 75 to calculate the annual average NO_x emission rates (in lb/MMBtu).
 - Perform an initial certification test according to the procedures of Appendix A of Part 75 on the NO_x/O₂ CEMS to verify the CEMS meet the accuracy specifications of Appendix A of Part 75, including:
 - 7-day calibration error tests,
 - Linearity checks,
 - RATAs,
 - Bias tests, and
 - Cycle time test.
 - Perform tests, as part of the initial certification procedures, to verify the proper computation of the hourly NO_x/O₂ average concentrations, hourly/quarterly/annual average NO_x emission rates (in lb/MMBtu), and missing data substitution procedures of Subpart D of Part 75.

- For CO₂ monitoring, Kingsburg will:
 - Use Equation G-4 of Appendix G of Part 75, a natural gas CO₂ F-factor of 1,040 scf/MMBtu, and records of hourly heat input rate to estimate hourly CO₂ emissions;
 - Use Equation F-12 of Appendix F of Part 75 to calculate the quarterly CO₂ emissions; and

- Use Equation F-13 of Appendix F of Part 75 to calculate the annual CO₂ emissions.

Regulatory Analysis – Part 60 vs Part 75

40 CFR Part 60, Subpart GG establishes the New Source Performance Standards (NSPS) for stationary gas turbines, rated not less than 10 MMBtu/hr (at lower heating value, or LHV), which commenced construction, reconstruction, or modification after October 1977 (but prior to February 2005). Since the combustion gas turbine was constructed in 1991 and has not been modified or reconstructed (as defined in Part 60) since February 2005, it is an affected “facility” under Subpart GG. Pursuant to 40 CFR 60.334(b)(1), Subpart GG requires a CEMS installed for Subpart GG monitoring to be certified according to Performance Specifications 2 (for NO_x) and 3 (for O₂) of Appendix B to Part 60.

Condition #8 of PTO #C-722-2-12 specifies a NO_x limit of 5.0 ppmv @ 15% O₂ for the gas turbine; Condition #8 cites District Rule 2201 (New and Modified Stationary Source Review, or NSR) and District Rule 4703 (Stationary Gas Turbines) as the regulatory authority for this emission limit. Condition #8 is more stringent than the Subpart GG NO_x emission limit of approximately 75 ppmv @ 15% O₂ specified in 40 CFR 60.332(a)(1) and, as such, has subsumed the Subpart GG NO_x emission limit in the PTO.

Condition #16 of PTO #C-722-2-12 requires Kingsburg to operate and maintain NO_x/O₂ CEMS; Condition #16 cites District Rule 4703 (Stationary Gas Turbines) as the regulatory authority for this requirement. Though not cited, District NSR may also have served as the regulatory authority for this CEMS monitoring requirement. Condition #21 requires the NO_x/O₂ CEMS to meet the performance specifications of 40 CFR 60, Appendices B and F. Condition #23 further requires Kingsburg to comply with the quality assurance (QA) testing and maintenance requirements of 40 CFR Part 60, Appendix F for the NO_x/O₂ CEMS. Therefore, the gas turbine is a Part 60 unit (subject to Subpart GG to the extent that NSR or Rule 4703 requirements have not subsumed Part 60 requirements) and is equipped with a Part 60 CEMS.

As noted above, 40 CFR 72.9(b)(1) requires the operator of an Acid Rain affected source to comply with the monitoring requirements of 40 CFR Part 75. 40 CFR 75.10(a)(2) requires an operator to install, certify, operate, and maintain a NO_x/O₂ CEMS with a DAHS for measuring and recording NO_x concentration (in ppm), O₂ concentration (in %) and NO_x emission rate (in lb/MMBtu). 40 CFR 75.10(b) requires an operator to install a NO_x/O₂ CEMS meeting the performance specifications in Appendix A to Part 75 and to maintain the CEMS in accordance with the QA and quality control procedures specified in Appendix B to Part 75.

Part 75 contains different QA requirements for NO_x/O₂ CEMS than does Part 60. These separate QA requirements occasionally overlap or contradict each other (e.g., whether QA needs to be performed while the unit is operating or whether quarterly QA needs to be performed). Simply adding the NO_x/O₂ monitoring requirements of Part 75 to the current PTO would require Kingsburg to operate its CEMS to meet the overlapping and contradictory requirements of Part 60 and Part 75 because, as noted above, Condition #21

of the PTO specifically requires the NO_x/O₂ CEMS to meet the performance specifications of Appendices B/F of Part 60. These overlapping and contradictory requirements can create confusion for operators, thus increasing the likelihood of monitoring deviations associated with QA requirements.

However, 40 CFR 60.334(b)(2)(iii) allows an operator who has installed a Part 75 NO_x/O₂ CEMS (and is meeting the ongoing requirements of Part 75) to use the Part 75 CEMS to meet the CEMS monitoring requirements of Subpart GG. The Part 75 missing data substitution methodology is not used to identify excess emissions for the purposes of Subpart GG. Instead, periods of missing CEMS data are still reported as monitor downtime in the District's Quarterly CEMS Report, which also serves as a Part 60 Excess Emissions and Monitor Performance Report required by 40 CFR 60.7(c-d).

Proposed Permit Conditions

Kingsburg proposes the changes shown below, in redline/strikeout format, to the permit conditions for PTO #C-722-2-12 to incorporate the requirements of the Acid Rain program and to eliminate the overlap/contradictions between Parts 60 and 75.

16. ~~Permittee shall install, operate, and maintain in calibration a system that continuously measures and records the exhaust gas NO_x and O₂ concentrations. The NO_x and O₂ CEMS shall meet EPA requirements as specified in 40 CFR Part 60 or other systems acceptable to the EPA.~~ The owner or operator shall certify, maintain, operate and quality-assure a CEMS that continuously measures and records the exhaust gas NO_x and O₂ concentrations. A NO_x/O₂ CEMS meeting the requirements of 40 CFR 75 shall be used to meet the requirements 40 CFR 60.334. However, the missing data substitution methodology provided for in 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the Quarterly CEMS Report required by Rule 1080. [40 CFR 60.334(b)(2)(iii), District Rules 2520, 9.3.2, 4102, and 4703, 6.2.1 and 6.2.3]
Federally Enforceable Through Title V Permit
21. ~~All CEMS shall meet the performance specification requirements in 40 CFR 75, Appendix A (including thermal stabilization periods) in 40 CFR 60 Appendix F, 40 CFR 51 Appendix P, and Part 60 Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 75.10(b) and District Rules 1080, 6.5-6.6 and 2520, 9.3.2]~~
All CEMS shall meet the performance specification requirements in 40 CFR 75, Appendix A (including thermal stabilization periods) in 40 CFR 60 Appendix F, 40 CFR 51 Appendix P, and Part 60 Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 75.10(b) and District Rules 1080, 6.5-6.6 and 2520, 9.3.2]
Federally Enforceable Through Title V Permit
24. ~~Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS in accordance with the procedures and guidance specified in 40 CFR 75.60 Appendix B/F. [40 CFR 75.10(b) and District Rules 2520, 9.3.2 and 4703, 6.2.3]~~ Federally Enforceable Through Title V Permit
32. ~~The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry) and the natural gas sulfur content. EPA Methods 7E or 20 shall be used for NO_x~~
The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry) and the natural gas sulfur content. EPA Methods 7E or 20 shall be used for NO_x

emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. ASTM D1072-06, ASTM D4468-85 (Reapproved 2006), ASTM D5504-01, ASTM D6667-04, ASTM D3246-96, or any other method allowed by 40 CFR 75 Appendix D shall be used to determine the sulfur content of the natural gas. [40 CFR 60.8(a), 40 CFR 60.335, 40 CFR 75, Appendix D, 2.3.3.1.2 and District Rule 4703,5.1,6.3.1,6.4.1,6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

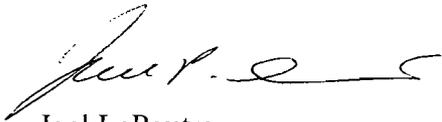
30. The HHV and LHV GCV of the fuel combusted natural gas shall be determined monthly using ASTM D3588-98, ASTM 1826-94 (reapproved in 1998), or ~~ASTM 1945~~ ASTM D4891-89 (Reapproved 2006), GPA Standard 2172-96, Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis, GPA Standard 2261-00, Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography, or any other method allowed by 40 CFR 75 Appendix D. [40 CFR Part 75, Appendix D, 2.3.4 ~~District Rule 4703, 6.4.5~~] Federally Enforceable Through Title V Permit
45. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
46. 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. [40 CFR 72] Federally Enforceable Through Title V Permit
47. The owners and operators of each source and each affected unit at the source shall hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of SO₂ for the previous calendar year from the unit. [40 CFR 72] Federally Enforceable Through Title V Permit
48. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
49. An allowance shall not be deducted in order to comply with the requirements of 40 CFR Part 72, prior to the calendar year for which the allowance was allocated. [40 CFR 72] Federally Enforceable Through Title V Permit
50. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit SO₂ in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to

terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit

51. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
53. The owners and operators of an affected unit that has excess emissions in any calendar year shall (i) pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 72. [40 CFR 72] Federally Enforceable Through Title V Permit
54. The owners and operators of each affected unit at the source shall keep and make readily available upon request, for a period of five years from the date the document is created, the Certificate of Representation for the Designated Representative for the source and all documents that demonstrate the truth of the statements in the Certificate of Representation, in accordance with 40 CFR 72.24. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new Certificate of Representation changing the Designated Representative. [40 CFR 72] Federally Enforceable Through Title V Permit
55. The owners and operators of each affected unit at the source shall keep and make readily available upon request each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR Part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
56. 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 75 Subpart I. [40 CFR 72] Federally Enforceable Through Title V Permit

If you have any questions regarding this application, please do not hesitate to call Dan Welch of Sierra Research at (916) 273-5130. Sierra Research is serving as Kingsburg's consultant on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel LePoutre". The signature is fluid and cursive, with a long horizontal stroke at the end.

Joel LePoutre
Asset Manager

Attachments

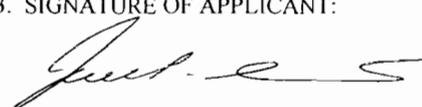
cc: Ryan Keefe, KES Kingsburg LP
Dan Welch, Sierra Research

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- AUTHORITY TO CONSTRUCT (ATC) - New Emission Unit
- AUTHORITY TO CONSTRUCT (ATC) - Modification of Emission Unit With Valid PTO/Valid ATC
- AUTHORITY TO CONSTRUCT (ATC) - Renewal of Valid Authority to Construct
- PERMIT TO OPERATE (PTO) - Existing Emission Unit Now Requiring a Permit to Operate

1. PERMIT TO BE ISSUED TO: KES-KINGSBURG L.P.	
2. MAILING ADDRESS: STREET/P.O. BOX: P.O. Box 217	
CITY: Kingsburg	STATE: CA ZIP CODE: 93631
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:	
STREET: 11765 Mountain View CITY: Kingsburg	
_____/4 SECTION _____ TOWNSHIP _____ RANGE _____	
WITHIN 1,000 FT OF A SCHOOL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
S.I.C. CODE(S) OF FACILITY (If known): 4911	
4. GENERAL NATURE OF BUSINESS: Electric power generation and steam production	
INSTALL DATE: May 2012	
5. TITLE V PERMIT HOLDERS ONLY: Do you request a COC (EPA Review) prior to receiving your ATC (If yes, please complete and attach a Compliance Certification form (TVFORM-009))? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
6. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)	
Implementation of the requirements of the Acid Rain Program, for which the Kingsburg Cogen Facility is a "newly affected source."	
7. PERMIT REVIEW PERIOD: Do you request a three- or ten-day period to review the draft Authority to Construct permit? Please note that checking "YES" will delay issuance of your final permit by a corresponding number of working days. See instructions for more information on this review process.	
<input checked="" type="checkbox"/> 3-day review <input type="checkbox"/> 10-day review <input type="checkbox"/> No review requested	
8. HAVE YOU EVER APPLIED FOR AN ATC OR PTO IN THE PAST? If yes, ATC/PTO#: C-722-2-12 <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Optional Section 11. DO YOU WANT TO RECEIVE INFORMATION ABOUT EITHER OF THE FOLLOWING VOLUNTARY PROGRAMS? <input type="checkbox"/> "HEALTHY AIR LIVING (HAL) BUSINESS PARTNER" <input type="checkbox"/> "INSPECT"
9. IS THIS APPLICATION FOR THE CONSTRUCTION OF A NEW FACILITY? (If "Yes" is checked, please complete the CEQA Information form) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
10. IS THIS APPLICATION SUBMITTED AS THE RESULT OF EITHER A NOTICE OF VIOLATION OR A NOTICE TO COMPLY? If yes, NOV/NTC #: _____ <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
12. TYPE OR PRINT NAME OF APPLICANT: Joel LePoutre	TITLE OF APPLICANT: Asset Manager
13. SIGNATURE OF APPLICANT: 	DATE: 4/4/12
PHONE #: (559) 891-9040	
FAX #: (559) 891-1089	
E-MAIL: jlepoutre@pureenergyllc.com	

FOR APCD USE ONLY:

DATE STAMP:	FILING FEE RECEIVED: \$ _____ CHECK #: _____
	DATE PAID: _____
	PROJECT #: C-1120911 FACILITY ID: C-722

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: KES-Kingsburg L.P.	FACILITY ID: C - 722
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input checked="" type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: KES-Kingsburg L.P.	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:



Signature of Responsible Official

4/4/12

Date

Joel LePoutre

Name of Responsible Official (please print)

Asset Manager

Title of Responsible Official (please print)



Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 A Plant Code is a 4 or 5 digit number assigned by the Department of Energy=s (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, contact EIA at (202) 586-4325 or (202) 586-2402.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority=s operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Acid Rain Hotline at (202) 343-9620.

Paperwork Burden Estimate

The public reporting and record keeping burden for this collection of information is estimated to average 8 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. **Do not send the completed form to this address.**

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 of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.**STEP 3, 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 any other provision of the Act, including the provisions of title I of the Act relating

Effect on Other Authorities, Cont'd.

STEP 3, 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.

Certification

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

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

Name Joel Lepoutre, Asset Manager and Designated Representative	
Signature 	Date 4/4/12

ATTACHMENT D

Existing Title V Operating Permit No.
C-722-2-15

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-2-12

EXPIRATION DATE: 04/30/2016

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH A NATURAL GAS-FIRED 110 MMBTU/HR DAVIS DUCT BURNER, SELECTIVE CATALYTIC REDUCTION, AND A HEAT RECOVERY STEAM GENERATOR UNIT

PERMIT UNIT REQUIREMENTS

1. Permit units C-722-2 and C-722-1 shall not operate simultaneously. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The gas turbine shall incorporate a 200 hp electric motor as starter engine, a fuel control module to regulate the fuel rate based on exhaust temperature and fuel output, and a steam injection system with metering and recording devices. [District NSR Rule] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule, 40 CFR 60.333(b) and 60.334; County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
4. The gas turbine natural gas fuel consumption rate shall not exceed 6,480 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The duct burner natural gas fuel consumption rate shall not exceed 2,300 MMBtu per day [District Rule] Federally Enforceable Through Title V Permit
6. Permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 5.0 ppmvd NO_x @ 15% O₂ (based on a 3-hour rolling average with at least one sample point per 15-minute interval), 0.0029 lb-SO_x/MMBtu, 0.006 lb-PM₁₀/MMBtu, 34 ppmv CO @ 15% O₂, 0.023 lb-VOC/MMBtu, or 15 ppmv-ammonia @ 15% O₂. [40 CFR 60.332, District NSR Rule; District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
9. During start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 0.0029 lb-SO_x/MMBtu, 0.006 lb-PM₁₀/MMBtu, 0.023 lb-VOC/MMBtu. [District NSR Rule; and District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
10. Daily emissions from the gas turbine/duct burner/HRSG unit shall not exceed any of the following (including thermal stabilization periods): 149.1 lb-NO_x/day, 23.4 lb-SO_x/day, 37.0 lb-PM₁₀/day, 503.7 lb-CO/day, or 147.6 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The ammonia concentration shall not exceed 15 ppmv at 15% O₂. The ammonia concentration limits shall not apply during startup, which is not to exceed four hours, or shutdown, which is not to exceed two hours. [District Rule 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO_x concentration ppmvd across the catalyst corrected to 15% O₂ after performing (inlet - outlet) subtraction, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O₂. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
14. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit
15. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shut down is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703, 5.3] Federally Enforceable Through Title V Permit
16. Permittee shall install, operate, and maintain in calibration a system that continuously measures and records the exhaust gas NO_x and O₂ concentrations. The NO_x and O₂ continuous emissions monitoring systems shall meet EPA requirements as specified in 40 CFR Part 60 or other systems that are acceptable to the EPA. [40 CFR 60.334(b), District Rules 2520, 9.3.2, 4102, and 4703, 6.2.1 and 6.2.3] Federally Enforceable Through Title V Permit
17. The Continuous Emissions Monitoring equipment must be linked to a data logger which is compatible with the District's Data Acquisition System. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. All CEM systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [District Rule 2520, 9.3.2 and 40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
19. Emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with the applicable test method, or, for continuous emission monitoring data, all applicable requirements of 40 CFR 60. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rules 1080, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. All CEM systems shall meet the performance specification requirements (including thermal stabilization periods) in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rules 1080, 6.5, 6.6 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rules 1080, 7.1 and 2520, 9.5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

23. Results of CEM systems shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2 and 2520, 9.3.2 and 60.13(h)] Federally Enforceable Through Title V Permit
24. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM system in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 2520, 9.3.2 and 4703, 6.2.3] Federally Enforceable Through Title V Permit
25. Permittee shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: 1) time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 2) averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; 3) applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and 5) a negative declaration when no excess emissions occurred. [40 CFR 60.7(c) and 60.334 and District Rules 1080, 8.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
26. A violation of the NO_x emission standard during a three hour averaging period indicated by the CEM system shall be reported to the APCO within 96 hours. [District Rules 1080, 9.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
27. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
28. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
29. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335, and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
30. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit
33. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rule 4102]
34. Source testing to measure the VOC emission rates (lb/hr and ppmvd @ 15% O₂) shall be conducted every twelve months. [District Rule 1081 and 4703] Federally Enforceable Through Title V Permit
35. Source testing to measure the PM₁₀ emission rate (lb/MMBtu) and the ammonia emission rate (ppmv @ 15% O₂) shall be conducted once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Source testing to measure volatile organic compounds (VOC) shall be conducted using EPA Method 18 or 25. [District Rule 1081] Federally Enforceable Through Title V Permit
37. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
38. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rule 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

39. Permittee shall maintain records of the following: 1) the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the permit unit; 2) performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS; and 3) emission measurements. [District Rules 1080, 7.3, 2520, 9.4.2, 4703, 6.2.8, and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
40. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.4.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit
41. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i), and (j), and 60.335 (b), and (c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
44. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: 40 CFR 60.42b, 43b, 44b, 46b, 48b, and 49b. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.