



JUN 2 0 2013

Mr. Kevin Cunningham Northern California Power Agency P O Box 1478 Lodi. CA 95241-1478

Final - Authority to Construct / COC (Significant Mod)

District Facility # N-2697 Project # N-1130201

Dear Mr. Cunningham:

The Air Pollution Control Officer has issued an Authority to Construct (ATC N-2697-5-1) with a Certificate of Conformity to Northern California Power Agency at 12745 North Thornton Road, Lodi, California. This project is to increase the hourly CO startup and shutdown emissions, establish combustor tuning period, and to modify fuel flow meter requirements to match with the fuel flow scheme used for the gas turbine. Enclosed are the Authority to Construct and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permit was published on May 13, 2013. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on May 9, 2013. No comments were received following the District's preliminary decision on this project.

Prior to operating with modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

> Seved 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: 681-392-5585

Mr. Kevin Cunningham Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

David Warner

Sincerely,

Director of Permit Services

Enclosures

CC:

Mike Tollstrup, CARB (w/enclosure) via email Gerardo C. Rios, EPA (w/enclosure) via email Eric W. Veerkamp, CEC (w/enclosure) via email

Newspaper notice for publication in Stockton Record and for posting on valleyair.org

NOTICE OF FINAL DECISION FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue an Authority to Construct to Northern California Power Agency at 12745 North Thornton Road, Lodi, California, California. This project is to increase the hourly CO startup and shutdown emissions, establish combustor tuning period, and to modify fuel flow meter requirements to match with the fuel flow scheme used for the gas turbine.

No comments were received following the District's preliminary decision on this project.

The District's analysis of the legal and factual basis for this proposed action, project #N-1130201, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm, the SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356, and at any other District office. For additional information, please contact the District at (209) 557-6400.





AUTHORITY TO CONSTRUCT

PERMIT NO: N-2697-5-1 ISSUANCE DATE: 06/17/2013

LEGAL OWNER OR OPERATOR: NORTHERN CALIFORNIA POWER

MAILING ADDRESS: 651 COMMERCE DR ROSEVILLE, CA 95678

LOCATION: 12745 N THORNTON RD

LODI, CA 95241

EQUIPMENT DESCRIPTION:

MODIFICATION OF 294 MW (NOMINAL) COMBINED-CYCLE ELECTRIC GENERATION PLANT CONSISTING OF A SIEMENS INDUSTRIAL FRAME "FLEX PLANT 30" STG6-5000F NATURAL GAS-FIRED TURBINE ENGINE WITH DRY LOW-NOX COMBUSTORS, AN UNFIRED HEAT RECOVERY STEAM GENERATOR SERVED BY A SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION AND AN OXIDIZATION CATALYST AND A STEAM TURBINE GENERATOR: INCREASE HOURLY CO STARTUP AND SHUTDOWN EMISSION LIMITS, ESTABLISH COMBUSTOR TUNING PERIOD, MODIFY FUEL FLOW METER CONDITION

CONDITIONS

- This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
- The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
- 4. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
- 5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seved Sadredin Executive Director / APC/

DAVID WARNER, Director of Permit Services

- 6. Particulate matter emissions from the gas turbine system shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 7. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 8. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 9. Commissioning period shall commence when all mechanical, electrical, and control systems are installed and individual system startup has been completed, or when a gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the plant has completed initial source testing, completed final plant tuning, and is available for commercial operation. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The duration of startup or shutdown period shall not exceed 3.0 hours per event for any type of startup event (hot, warm, or cold). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 11. The combined startup and shutdown duration for all events shall not exceed 6.0 hours during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. The owner/operator shall maintain records of the date, start-up time, downtime for gas turbine and the steam turbine prior to startup, startup type, minute-by-minute turbine load (MW), and NOx and CO concentrations (ppmvd @ 15% O2) measurement using CEMS, for each startup event in the first 12 months of operation following the end of the commissioning period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Within 15 months of the end of the commissioning period, the owner/operator shall submit to the District, the CARB and the EPA proposed new time limits for each type of startup that reflect the effect of "Flex Plant 30" fast start-up technology. The proposed time limits shall be based on the required data collected in the first 12 months of operation following the end of the commissioning period. The submittal must include all CEMS data. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. A margin of compliance of 60 minutes (or less) may be added to the longest startup to establish a startup limit for each type of startup event (hot, warm, or cold). The established startup limit shall not exceed 3.0 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. The District shall administratively establish appropriate startup times for each startup mode (hot, warm, or cold), and associated recordkeeping requirements. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. During all types of operation, including startup (cold, warm and hot), shutdown, and combustor tuning periods, ammonia injection into the SCR system shall occur once the minimum temperature of 406°F at the catalyst face has been reached to ensure NOx emission reductions can occur with a reasonable level of ammonia slip. The District may administratively modify the temperature as necessary following any replacement of the SCR catalyst material. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. The SCR system shall be equipped with a continuous temperature monitoring system to measure and record the temperature at the catalyst face. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. During start-up, and shutdown and combustor tuning periods, the emissions shall not exceed any of the following limits: NOx (as NO2) 160.00 lb/hr; CO 1,500.00 lb/hr; VOC (as methane) 16.00 lb/hr; PM10 9.00 lb/hr; SOx (as SO2) 6.10 lb/hr; or NH3 28.76 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. 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. .

 [District Rule 4703, 3.29] Federally Enforceable Through Title V Permit
- 20. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status ending when the fuel supply to the unit is completely turned off. [District Rule 4703, 3.26] Federally Enforceable Through Title V Permit

- 21. Combustor tuning periods are any periods, not to exceed 8 hours in any calendar day or 40 hours in any calendar year, when combustor tuning activities are taking place. Combustor tuning activities are defined as any testing, adjustment, tuning, and calibration activities recommended by the gas turbine manufacturer to ensure safe and reliable steady-state operation of the gas turbine following replacement of the combustor components, during seasonal tuning events, or at other times when recommended by the turbine manufacturer or necessary to maintain low emissions performance. This includes, but is not limited to, adjusting the amount of fuel distributed between the combustion turbine's staged fuel systems to simultaneously minimize NOx and CO production while minimizing combustor dynamics and ensuring combustor stability. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup, shutdown and combustor tuning periods. [District Rules 2201 and 4703, 5.3.2] Federally Enforceable Through Title V Permit
- 23. Except during startup, shutdown and combustor tuning periods, emissions from the gas turbine system shall not exceed any of the following limits: NOx (as NO2) 15.54 lb/hr and 2.0 ppmvd @ 15% O2; CO 9.46 lb/hr and 2.0 ppmvd @ 15% O2; VOC (as methane) 3.79 lb/hr and 1.4 ppmvd @ 15% O2; PM10 9.0 lb/hr; or SOx (as SO2) 6.10 lb/hr. NOx (as NO2) emission limits are based on 1-hour rolling average period. All other emission limits are based on 3-hour rolling average period. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit
- 24. NH3 emissions shall not exceed any of the following limits: 10.0 ppmvd @ 15% O2 over a 24-hour rolling average period and 28.76 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Each 3-hour rolling average period will be compiled from the three most recent one hour periods. Each one hour period shall commence on the hour. Each one hour period in a twenty-four hour rolling average for ammonia slip will commence on the hour. The twenty-four hour rolling average shall be calculated using the most recent twenty-four one-hour periods. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Emissions from the gas turbine system, on days when startup, shutdown and/or combustor tuning activities occur, shall not exceed the following limits: NOx (as NO2) 879.7 lb/day; CO 5,570.3 lb/day; VOC 164.2 lb/day; PM10 216.0 lb/day; SOx (as SO2) 146.4 lb/day, or NH3 690.3 lb/day. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Emissions from the gas turbine system, on days when startup, shutdown and/or combustor tuning activities do not occur, shall not exceed the following: NOx (as NO2) 373.0 lb/day; CO 227.0 lb/day; VOC 91.0 lb/day; PM10 216.0 lb/day; SOx (as SO2) 146.4 lb/day, or NH3 690.3 lb/day. Daily emissions shall be compiled for a twenty-four hour period starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. Gas turbine system shall be fired on PUC-regulated natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dscf of natural gas. [District Rule 2201 and 40 CFR 60.4330(a)(2)] Federally Enforceable Through Title V Permit
- 29. NOx (as NO2) emissions from the gas turbine system shall not exceed any of the following: 1st quarter: 38,038 lb; 2nd quarter: 38,411 lb; 3rd quarter: 37,126 lb; 4th quarter: 37,840 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. CO emissions from the gas turbine system shall not exceed any of the following: 1st quarter: 142,312 lb; 2nd quarter: 142,539 lb; 3rd quarter: 86,374 lb; 4th quarter: 113,660 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
- 31. VOC emissions from the gas turbine system shall not exceed any of the following: 1st quarter: 8,086 lb; 2nd quarter: 8,177 lb; 3rd quarter: 8,417 lb; 4th quarter: 8,323 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
- 32. NH3 emissions from the SCR system shall not exceed any of the following: 1st quarter: 62,122 lb; 2nd quarter: 62,812 lb; 3rd quarter: 63,502 lb; 4th quarter: 63,502 lb. [District Rule] Federally Enforceable Through Title V Permit
- 33. PM10 emissions from the gas turbine system shall not exceed any of the following: 1st quarter: 19,440 lb; 2nd quarter: 19,656 lb; 3rd quarter: 19,872 lb; 4th quarter: 19,872 lb. [District Rule 2201] Federally Enforceable Through Title V Permit

- 34. SOx (as SO2) emissions from the gas turbine system shall not exceed any of the following: 1st quarter: 13,176 lb; 2nd quarter: 13,322 lb; 3rd quarter: 13,469 lb; 4th quarter: 13,469 lb. [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. The total CO emissions from the gas turbine system (N-2697-5) and the auxiliary boiler (N-2697-7) shall not exceed 198,000 pounds in any 12-consecutive month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 36. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 37. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 38. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit
- 40. Source testing to measure startup and shutdown NOx, CO, and VOC mass emission rates shall be conducted at least once every seven years. CEM relative accuracy for NOx and CO shall be determined during startup and shutdown source testing in accordance with 40 CFR 60, Appendix F (Relative Accuracy Audit). If CEM data is not certifiable to determine compliance with NOX and CO startup emission limits, then startup and shutdown NOx and CO testing shall be conducted every 12 months. If an annual startup and shutdown NOx and CO relative accuracy audit demonstrates that the CEM data is certifiable, the startup and shutdown NOx and CO testing frequency shall return to the once every seven years schedule. [District Rule 1081] Federally Enforceable Through Title V Permit
- 41. Source testing to determine compliance with the NOx, CO, VOC and NH3 emission rates (lb/hr and ppmvd @ 15% O2) and PM10 emission rate (lb/hr) shall be conducted at least once every 12 months. [District Rules 2201 and 4703, 40 CFR 60.4400(a)] Federally Enforceable Through Title V Permit
- 42. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract, or (ii) monitored within 60 days after the end of commissioning period and weekly thereafter. If the sulfur content is less than or equal to 1.0 gr/100 dscf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume until compliance is demonstrated for eight consecutive weeks. [District Rule 2201 and 40 CFR 60.4360, 60.4365(a) and 60.4370(c)] Federally Enforceable Through Title V Permit
- 43. The following test methods shall be used: NOx EPA Method 7E or 20 or CARB Method 100; CO EPA Method 10 or 10B or CARB Method 100; VOC EPA Method 18 or 25; PM10 EPA Method 5 (front half and back half) or 201 and 202a; ammonia BAAQMD ST-1B; and O2 EPA Method 3, 3A, or 20 or CARB Method 100. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, 40 CFR 60.4400(1)(i)] Federally Enforceable Through Title V Permit
- 44. Fuel sulfur content shall be monitored using one of the following methods: ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [40 CFR 60.4415(a)(1)(i)] Federally Enforceable Through Title V Permit
- 45. 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
- 46. A mass or volumetric fuel flow meter that meets the requirements of 40 CFR Part 75 shall be installed, utilized and maintained to measure the amount of natural gas combusted in the unit. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

- 47. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx, CO and O2 concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup conditions, CEMS results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080, 2201 and 4703, 40 CFR 60.4340(b)(1) and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
- 48. The NOx and O2 CEMS shall be installed and certified in accordance with the requirements of 40 CFR Part 75. The CO CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 4A (PS 4A), or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.4345(a)] Federally Enforceable Through Title V Permit
- 49. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [District Rule 1080 and 40 CFR 60.4345(b)] Federally Enforceable Through Title V Permit
- 50. The CEMS data shall be reduced to hourly averages as specified in 40 CFR 60.13(h) and in accordance with 40 CFR 60.4350, or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [District Rule 1080 and 40 CFR 60.4350] Federally Enforceable Through Title V Permit
- 51. In accordance with 40 CFR Part 60, Appendix F, 5.1, the CO CEMS must be audited at least once each calendar quarter, by conducting cylinder gas audits (CGA) or relative accuracy audits (RAA). CGA or RAA may be conducted three of four calendar quarters, but no more than three calendar quarters in succession. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 52. The owner/operator shall perform a RATA for CO as specified by 40 CFR Part 60, Appendix F, 5.1.1, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 53. The NOx and O2 CEMS shall be audited in accordance with the applicable requirements of 40 CFR Part 75. Linearity reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 54. Upon written notice from the District, the owner or operator shall provide a summary of the data obtained from the CEMS. This summary shall be in the form and the manner prescribed by the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 55. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEMS data polling software system and shall make CEMS data available to the District's automated polling system on a daily basis. Upon notice by the District that the facility's CEMS is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEMS data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 56. The owner or operator shall maintain the following records: the date, time and duration of any malfunction of the continuous monitoring equipment; dates of performance testing; dates of evaluations, calibrations, checks, and adjustments of the continuous monitoring equipment; date and time period which a continuous monitoring system or monitoring device was inoperative. [District Rules 1080 and 2201 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
- 57. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

- 58. Monitor Downtime is defined as any unit operating hour in which the data for NOx, O2 concentrations is either missing or invalid. [40 CFR 60.4380(b)(2)] Federally Enforceable Through Title V Permit
- 59. The owner or operator shall maintain records of the following items on the combustor tuning activities: (1) date on which combustor tuning activity occurs, (2) description of each combustor tuning activity, (3) reason why each combustor tuning activity is required, (4) documentation (such as operating manuals, letters, e-mails, etc.) showing that each combustor tuning activity is necessary. [District Rule 2201] Federally Enforceable Through Title V Permit
- 60. The owner or operator shall maintain records of the following items: (1) hourly and daily emissions, in pounds, for each pollutant listed in this permit on the days startup, shutdown and/or combustor tuning activities of the gas turbine system occur, (2) hourly and daily emissions, in pounds, for each pollutant in this permit on the days startup, shutdown and/or combustor tuning activities of the gas turbine system do not occur, (3) quarterly emissions, in pounds, for each pollutant listed in this permit, and (4) the combined CO emissions (12 consecutive month rolling total), in pounds, for permit unit N-2697-5 and N-2697-7. [District Rule 2201] Federally Enforceable Through Title V Permit
- 61. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, total hours of operation, the type and quantity of fuel used, mode of start-up (cold, warm, or hot), duration of each start-up, duration of each shutdown, and duration of each combustor tuning event. [District Rule 2201 and 4703, 6.26, 6.28, 6.2.11] Federally Enforceable Through Title V Permit
- 62. The owner or operator shall maintain all records of required monitoring data and support information for a period of five years from the date of data entry and shall make such records available to the District upon request. [District Rules 2201 and 4703, 6.2.4] Federally Enforceable Through Title V Permit
- 63. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Date, time intervals, data and magnitude of excess NOx emissions, nature and the cause of excess (if known), corrective actions taken and preventive measures adopted; 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; 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; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.4375(a) and 60.4395] Federally Enforceable Through Title V Permit
- 64. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
- 65. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 or Rule 8011. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 66. An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 67. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 or Rule 8011. [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 68. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 or Rule 8011.

 [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 69. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 or Rule 8011. [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

- 70. Water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure shall be applied to unpaved vehicle travel areas as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071] Federally Enforceable Through Title V Permit
- 71. Where dusting materials are allowed to accumulate on paved surfaces, the accumulation shall be removed daily or water and/or chemical/organic dust stabilizers/suppressants shall be applied to the paved surface as required to maintain continuous compliance with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011 and limit Visible Dust Emissions (VDE) to 20% opacity. [District Rule 8011 and 8071] Federally Enforceable Through Title V Permit
- 72. On each day that 50 or more Vehicle Daily Trips or 25 or more Vehicle Daily Trips with 3 axles or more will occur on an unpaved vehicle/equipment traffic area, permittee shall apply water, gravel, roadmix, or chemical/organic dust stabilizers/suppressants, vegetative materials, or other District-approved control measure as required to limit Visible Dust Emissions to 20% opacity and comply with the requirements for a stabilized unpaved road as defined in Section 3.59 of District Rule 8011. [District Rule 8011 and 8071] Federally Enforceable Through Title V Permit
- 73. Whenever any portion of the site becomes inactive, Permittee shall restrict access and periodically stabilize any disturbed surface to comply with the conditions for a stabilized surface as defined in Section 3.58 of District Rule 8011. [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 74. Records and other supporting documentation shall be maintained as required to demonstrate compliance with the requirements of the rules under Regulation VIII only for those days that a control measure was implemented. Such records shall include the type of control measure(s) used, the location and extent of coverage, and the date, amount, and frequency of application of dust suppressant, manufacturer's dust suppressant product information sheet that identifies the name of the dust suppressant and application instructions. Records shall be kept for one year following project completion that results in the termination of all dust generating activities. [District Rules 8011, 8031 and 8071] Federally Enforceable Through Title V Permit
- 75. The owners and operators of each affected source and each affected unit at the source shall have an Acid Rain permit and operate in compliance with all permit requirements. [40 CFR 72] Federally Enforceable Through Title V Permit
- 76. 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 75] Federally Enforceable Through Title V Permit
- 77. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 78. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 79. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 80. 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
- 81. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 82. 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 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

- 83. 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
- 84. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 85. 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 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 86. The owners and operators of the each affected unit at the source shall keep on site 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: (i) 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; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 87. The owners and operators of each affected unit at the source shall keep on site 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 75] Federally Enforceable Through Title V Permit
- 88. 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 75] Federally Enforceable Through Title V Permit



Due Date 8/16/2013 Amount Due

\$ 2,992.40

Amount Enclosed

ATCFEE N1130201 2697 N99288 6/17/2013

RETURN THIS TOP PORTION ONLY, WITH REMITTANCE TO:

NORTHERN CALIFORNIA POWER 651 COMMERCE DR ROSEVILLE, CA 95678 SJVAPCD 4800 Enterprise Way Modesto, CA 95356-8718

Thank You!



San Joaquin Valley AIR POLLUTION CONTROL DISTRICT

SJVAPCD Tax ID: 77-0262563

Facility ID Invoice Date Invoice
N2697 6/17/2013 N9

Invoice Number N99288

NORTHERN CALIFORNIA POWER 12745 N THORNTON RD LODI, CA 95241 Invoice Type

Project: N1130201

PROJECT NUMBER: 1130201

APPLICATION FILING FEES ENGINEERING TIME FEES TOTAL FEES

LESS PREVIOUSLY PAID PROJECT FEES APPLIED TO THIS INVOICE

PROJECT FEES DUE (Enclosed is a detailed statement outlining the fees for each item.)

\$ 71.00 \$ 2,992.40 \$ 3,063.40 (\$ 71.00) \$ 2,992.40

Late Payment (see Rule 3010, Section 11.0 Late Fees)

Postmarked

Total Due

After 8/16/2013 through 8/26/2013

\$ 3,291.64

After 8/26/2013

\$ 4,488.60

After 9/15/2013

Permits To Operate MAY BE SUSPENDED

San Joaquin Valley Air Pollution Control District 4800 Enterprise Way, Modesto, CA 95356-8718, (209) 557-6400, Fax (209) 557-6475

San Joaquin Valley Air Pollution Control District

Invoice Detail

Facility ID: N2697

NORTHERN CALIFORNIA POWER

12745 N THORNTON RD

LODI, CA 95241

Invoice Nbr:

N99288

Invoice Date:

6/17/2013

Page:

e:

Application Filing Fees

Project Nbr	Permit Number	Description	Application Fee
N1130201	N-2697-5-1	MODIFICATION OF 294 MW (NOMINAL) COMBINED-CYCLE ELECTRIC GENERATION PLANT CONSISTING OF A SIEMENS INDUSTRIAL FRAME "FLEX PLANT 30" STG6-5000F NATURAL GAS-FIRED TURBINE ENGINE WITH DRY LOW-NOX COMBUSTORS, AN UNFIRED HEAT RECOVERY STEAM GENERATOR SERVED BY A SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION AND AN OXIDIZATION CATALYST AND A STEAM TURBINE GENERATOR: INCREASE HOURLY CO STARTUP AND SHUTDOWN EMISSION LIMITS, ESTABLISH COMBUSTOR TUNING PERIOD, MODIFY FUEL FLOW METER CONDITION	\$ 71.00

Total Application Filing Fees:

\$ 71.00

Engineering Time Fees

Project Nbr	Quantity	Rate	Description	Fee
N1130201	28.9 hours	\$ 106.00 /h	Standard Engineering Time	\$ 3,063.40
			Less Credit For Application Filing Fees	(\$ 71.00)
			Standard Engineering Time SubTotal	\$ 2,992.40

Total Engineering Time Fees: \$ 2,992.40