



APR 2 8 2011

Rachel Garza Wellhead Power Panoche, LLC 650 Bercut Drive, Suite C Sacramento, CA 95814

RE: Notice of Final Action - Authority to Construct

Project Number: C-1110069

Dear Ms. Garza:

The Air Pollution Control Officer has issued Authority to Construct permits to Wellhead Power Panoche, LLC for a 23.0 MW natural-gas turbine that will serve as a temporary replacement emissions unit (TREU) for one of the two 25.0 MW Pratt & Whitney Model FT4C-1 natural gas-fired gas turbines listed on Permit to Operate C-3844-1-7, at 43649 W. Panoche Road in Firebaugh, CA.

Enclosed are copies of the Authority to Construct permits 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 this Authority to Construct was published on March 22, 2011. The District's analysis of the proposal was also sent to CARB on March 16, 2011. No comments were received following the District's preliminary decision on this project.

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.

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

Amend May;

Enclosures

Seyed Sadredin

Executive Director/Air Pollution Control Officer





APR 2 8 2011

Mike Tollstrup, Chief Project Assessment Branch Stationary Source Division California Air Resources Board PO Box 2815 Sacramento, CA 95812-2815

Notice of Final Action - Authority to Construct

Project Number: C-1110069

Dear Mr. Tollstrup:

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Sincerely.

avid Warner

Director of Permit Services

DW:gb

Enclosures

Seved Sadredin Executive Director/Air Pollution Control Officer

NOTICE OF FINAL ACTION FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT PERMITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Authority to Construct permits to Wellhead Power Panoche, LLC for a 23.0 MW natural-gas turbine that will serve as a temporary replacement emissions unit (TREU) for one of the two 25.0 MW Pratt & Whitney Model FT4C-1 natural gas-fired gas turbines listed on Permit to Operate C-3844-1-7, at 43649 W. Panoche Road in Firebaugh, CA.

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

The application review for Project #C-1110069 is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.





AUTHORITY TO CONSTRUCT

PERMIT NO: C-3844-7-0 ISSUANCE DATE: 04/26/2011

LEGAL OWNER OR OPERATOR: WELLHEAD POWER PANOCHE, LLC.

MAILING ADDRESS: 650 BERCUT DR STE C SACRAMENTO, CA 95814

LOCATION: 43649 W PANOCHE RD FIREBAUGH, CA 93622

EQUIPMENT DESCRIPTION:

23.0 MW PRATT & WHITNEY MODEL FT4A-9 NATURAL GAS-FIRED GAS TURBINE ENGINE (GTE) WITH DRY LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY AND A SHARED SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH OXIDATION CATALYSTS AND INLET AIR FOGGING SHARED WITH PERMIT C-3844-1 USED AS A TEMPORARY REPLACEMENT UNIT (TREU) FOR ONE OF THE TURBINE LISTED ON PERMIT C-3844-1

CONDITIONS

- 1. This unit shall be removed from the site before 180 cumulative days on site in any twelve month period. [District Rule 2201]
- 2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule]
- 3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 5. 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]
- 6. This unit shall only operate when one of the turbines listed on permit unit C-3844-1 is not operating. [District Rule 2201]
- 7. No more than two turbines shall be operated at a time in the facility. [District Rule 2201]
- 8. Both turbine engines shall be operated simultaneously, except during start up and shut down. [District Rule 2201]
- 9. Gas turbine engines and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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.

Seyed Sadredin, Executive Director / APCO

DAMD WARNER, Director of Permit Services
C-3844-40: Apr 26 2011 8:34AM -- BRARG: Joint Inspection NOT Required

- 10. Gas turbine engines shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [40 CFR 60.334(a); and District Rules 2201 and 4703, 6.2.1]
- 11. Gas turbine engines shall be equipped with a single continuous emissions monitor (CEM) for NOx (before and after SCR system), CO, and O2. The CEM shall meet the requirements of 40 CFR part 60 and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334(a); and District Rules 2201 and 4703, 6.2.1]
- 12. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
- 13. Upon notice by the District that the facility's CEM system 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 CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
- 14. 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]
- 15. Gas turbine engines shall be fired exclusively on natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]
- 16. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract. [District Rule 2201 and 40 CFR 60.334(h)(3)]
- 17. Combined annual emissions from units C-3844-1, '5, '6 and '7 shall not exceed any of the following limits: 22,816 lb-NOx/year, 7,068 lb-SOx/year, 16,368 lb-PM10/year, 89,032 lb-CO/year, or 6,448 lb-VOC/year. [District Rule 2201]
- 18. Maximum annual heat input for both natural gas-fired turbine engines combined shall not exceed 2,480,000 MMBtu/year, measured on a calendar year period. [District Rule 2201]
- 19. Daily combined NOx emissions from both natural gas-fired turbine engines shall not exceed 148.8 lb-NOx/day, measured on a 24 hour rolling period. [District Rule 2201]
- 20. Annual combined NOx emissions from both natural gas-fired turbine engines shall not exceed 22,816 lb-NOx/year, measured on a calendar year period. [District Rule 2201]
- 21. Except during startup and shutdown periods, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 6.20 lb-NOx/hour (as NO2) equivalent to 2.5 ppmvd @ 15% O2, 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour equivalent to 16.0 ppmvd @ 15% O2, 1.75 lb-VOC/hour (as methane) equivalent to 2.0 ppmv @ 15% O2, or 10 ppmv ammonia @ 15% O2. All emission limits are based on one hour rolling averages. [District Rules 2201, 4001, and 4703, 5.1.2 and 5.2]
- 22. During periods of startup and shutdown, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 25.0 lb-NOx/hour (as NO2), 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour, or 1.75 lb-VOC/hour (as methane), based on one hour averages. [District Rules 2201, 4001, and 4703, 5.3]
- 23. Startup shall be 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 operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.26, 3.29 and 5.3]
- 24. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703, 3.23 and 5.3]
- 25. The duration of each startup or each shutdown shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703, 5.3.1.1]

- 26. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2]
- 27. Compliance testing to measure NOx (as NO2), PM10, CO, VOC, ammonia emissions, and fuel gas sulfur content requirements of this permit shall be conducted within 60 days of startup and at least once every twelve months. [District Rules 2201, 4001, and 4703, 6.3.1]
- 28. Compliance testing to measure NOx (as NO2), CO, and ammonia emissions shall be conducted within 60 days of switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa. [District Rules 2201 and 4001]
- 29. Compliance testing shall be required at least once per twelve-month period for which the technology is used. Switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa, shall not be required solely for source testing purposes. [District Rules 2201 and 4001]
- 30. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = {[a-(b x c/1,000,000)] x 1,000,000/b}, where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), and c = change in measured NOx concentration ppmv at 15% O2 across the catalyst. [District Rule 4102]
- 31. Compliance testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 32. The following test methods shall be used: NOx EPA Method 7E or 20; CO EPA Method 10 or 10B; VOC EPA Method 18 or 25; PM10 EPA Method 5 (front half and back half); ammonia BAAQMD ST-1B; O2 EPA Method 3, 3A, or 20; and fuel gas sulfur content: ASTM D3246. 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, 6.4; and 40 CFR 60.335(a), and 40 CFR 60.335(b)(10)]
- 33. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any continuous emission monitor, continuous emission monitor measurements and calculated NOx mass emission rates (lb/hr). [District Rules 2201 and 4703, 6.2]
- 34. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, duration of start-up or shutdown, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6 and 6.2.8]
- 35. Results of continuous emissions monitoring 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 Rule 1080]
- 36. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
- 37. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, 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]
- 38. 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]

- 39. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective 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; and a negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5); and District Rule 1080]
- 40. All records shall be maintained, retained on-site for a minimum of five years and shall be made available for District inspection upon request. [District Rules 2201 and 4703, 6.2.4]