

May 15, 2023

Mr. Andrew Robertson
Wellhead Power Panoche, LLC
650 Bercut Dr, Ste C
Sacramento, CA 95811

Re: Final - Authority to Construct / Certificate of Conformity (Significant Mod)
Facility Number: C-3844
Project Number: C-1221309

Dear Mr. Robertson:

The Air Pollution Control Officer has issued Authority to Construct (ATC) C-3844-1-16 with a Certificate of Conformity to Wellhead Power Panoche, LLC at 43649 W Panoche Rd, Firebaugh. The project consists of the modification of the permit requirements for the existing 49.9 MW power plant to reduce the source testing and relative accuracy test audit (RATA) frequencies in accordance with the provisions of District Rule 4703 and 40 CFR Part 75, respectively. Enclosed are the ATC and a copy of the notice of final action that has been posted on the District's website (www.valleyair.org).

Notice of the District's preliminary decision to issue the ATC was posted on March 20, 2023. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on March 20, 2023. 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.

Prior to operating with the modifications authorized by the ATC, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms are found on the District's website at www.valleyair.org/permits/TVforms.

Samir Sheikh
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

Mr. Andrew Robertson
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Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,


FOR Brian Clements
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: Gerardo Rios, EPA (w/enclosure) via EPS

Facility # C-3844
WELLHEAD POWER PANOCHE, LLC.
650 BERCUT DR, STE C
SACRAMENTO, CA 95811

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Modify Your Title V Permit.** Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at <http://www.valleyair.org/permits/TVforms>.
3. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
4. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
5. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
6. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
7. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at http://www.valleyair.org/busind/comply/compliance_forms.htm.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

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Executive Director/Air Pollution Control Officer

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AUTHORITY TO CONSTRUCT

PERMIT NO: C-3844-1-16

ISSUANCE DATE: 05/08/2023

LEGAL OWNER OR OPERATOR: WELLHEAD POWER PANOCHÉ, LLC.

MAILING ADDRESS: 650 BERCU T DR, STE C
SACRAMENTO, CA 95811

LOCATION: 43649 W PANOCHÉ RD
FIREBAUGH, CA 93622

EQUIPMENT DESCRIPTION:

MODIFICATION OF 49.9 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND ELECTRICAL POWER GENERATING SYSTEM CONSISTING OF TWO 25.0 MW PRATT & WHITNEY MODEL #FT4C1 NATURAL GAS-FIRED (TWINPAC CONFIGURATION) GAS TURBINE ENGINES (GTE) WITH DRY LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY, A SHARED SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH A 28" CORMETECH LAYER AND INLET AIR FOGGING: REDUCE SOURCE TESTING AND RATA FREQUENCIES

CONDITIONS

1. 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
3. 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 Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
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] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

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.

Samir Sheikh, Executive Director / APCO

For **Brian Clements, Director of Permit Services**

C-3844-1-16 : May 8 2023 5:42PM - AIYABEU : Joint Inspection NOT Required

7. Both turbine engines shall be operated simultaneously, except during start-up and shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The 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] Federally Enforceable Through Title V Permit
9. The gas turbine engines shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
10. The gas turbine engines shall be equipped with a single continuous emissions monitor (CEM) for NO_x (before and after SCR system), CO, and O₂. The CEM shall meet the requirements of 40 CFR part 60, Appendix F and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
11. The facility shall 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] Federally Enforceable Through Title V Permit
12. 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] Federally Enforceable Through Title V Permit
13. 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 NO_x, 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
14. The 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 Rules 2201 and 4801, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
15. Combined annual emissions from units C-3844-1 and C-3844-5 shall not exceed any of the following limits: 22,816 lb-NO_x/year, 7,068 lb-SO_x/year, 16,368 lb-PM₁₀/year, 89,032 lb-CO/year, or 6,448 lb-VOC/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. Daily combined NO_x emissions from both natural gas-fired turbine engines shall not exceed 148.8 lb-NO_x/day, measured on a 24 hour rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual combined NO_x emissions from both natural gas-fired turbine engines shall not exceed 22,816 lb-NO_x/year, measured on a calendar year period. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Except during thermal stabilization periods, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 6.20 lb-NO_x/hour (as NO₂), equivalent to 2.5 ppmvd @ 15% O₂; 1.92 lb-SO_x/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 (1) hour rolling averages. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
20. During periods of thermal stabilization, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 25.0 lb-NO_x/hour (as NO₂), 1.92 lb-SO_x/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 Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. Thermal stabilization is defined as the start-up or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours as stated in Section 3.25 of Rule 4703. [District Rule 4703] 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 start-up and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
23. Compliance testing to measure NO_x (as NO₂), CO, VOC, ammonia emissions, and fuel gas sulfur content requirements of this permit shall be conducted at least once every twelve months. Compliance testing may be conducted once every 24 months if the turbines operate less than 877 hours in a calendar year. A one calendar quarter grace period is provided if operation equals or exceeds 877 hours in a calendar year and compliance testing cannot be conducted within that year [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
24. Compliance testing to measure PM₁₀ shall be conducted at least once every 60 months. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Compliance testing to measure NO_x (as NO₂), CO, and ammonia emissions shall be conducted within 60 days of switching the turbine combustion emission control technology from Dry Low NO_x (DLN) to water injection technology, or vice versa. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Compliance testing shall be required at least once per twelve-month period for which the technology is used. Compliance testing may be conducted once every 24 months if the turbine operates less than 877 hours in a calendar year. A one calendar quarter grace period is provided if operation equals or exceeds 877 hours in a calendar year and compliance testing cannot be conducted within that year. Switching the turbine combustion emission control technology from Dry Low NO_x (DLN) to water injection technology, or vice versa, shall not be required solely for source testing purposes. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
27. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O₂ = $\{[a-(b \times c/1,000,000)] \times 1,000,000/b\}$, 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 NO_x concentration ppmv at 15% O₂ across the catalyst. [District Rule 4102]
28. 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] Federally Enforceable Through Title V Permit
29. The following test methods shall be used, PM₁₀: EPA Method 5 (front half and back half), NO_x: EPA Method 7E or 20, CO: EPA Method 10 or 10B, O₂: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, 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, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
30. 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] Federally Enforceable Through Title V Permit
31. Cylinder Gas 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] Federally Enforceable Through Title V Permit
32. The permittee shall perform relative accuracy test audits (RATA) as specified in 40 CFR Part 75, Appendix B, at least once every two successive QA operating quarters (as defined in §72.2). Calendar quarters with less than 168 hours of operating time may be excluded in determining the RATA frequency, in which case the RATA shall be conducted at least once every eight calendar quarters. A grace period of 720 hours is provided if a RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA. 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 75, Appendix B. [District Rule 1080 and 40 CFR Part 75, Appendix B] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. Demonstration of compliance with the annual average sulfur content limit shall be by a 12 month rolling average of the sulfur content either: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract; or (ii) tested using ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [District Rule 1081 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
34. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
35. 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. [District Rule 1080 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
36. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
37. 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, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
38. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, and calculated NOx mass emission rates (lb/hr). [District Rule 2201] Federally Enforceable Through Title V Permit
39. The permittee shall keep records of the date, time, and duration of each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
40. All records shall be maintained, retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit