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October 5, 2005

Mr. David Warner
Director of Permit Services
San Joaquin County Air Pollution Control District
2700 M Street, Suite 275
Bakersfield, CA 93301

Re: Notice of a Preliminary Determination of Compliance
Project No. 1052027: Pastoria Energy Facility Expansion

Dear Mr. Warner:

Thank you for the opportunity to comment on the Preliminary Determination of Compliance issued on August 31, 2005, for the Pastoria Energy Facility Expansion project. Our minor technical comments are attached.

If you have any questions regarding these comments, please do not hesitate to call.

Sincerely,

Gary Rubenstein (FOIE)

attachment

cc: Richard Karrs, SJVAPCD
Thomas E. Goff, SJVAPCD
Andrew Whittome, Calpine
Rick Tetzloff, Calpine
Barbara McBride, Calpine
Gary Fuller, Calpine
Gregg Wheatland, Ellison Schneider & Harris
Jennifer Scholl, URS
Dr. James Reede, CEC
Mike Ringer, CEC
William Walters, Aspen Environmental

Comments on Pastoria Expansion Project PDOC/Engineering Evaluation

1. Page 3, table showing hypothetical operating scenario. Total hours should correspond to hours in quarter. The table should be revised as follows:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
Number of Startup/Shutdown Hours	75	75	75	75	300
Number of Full Load Hours	2085	2109	2133	2133	8460
Total Hours	2160	2184	2208	2208	8760

2. Page 6. "Initial commissioning is a one-time event, lasting over a period of up to three weeks." Please revise, as the commissioning period is expected to last up to three months.

3. Page 7, calculation of startup emissions in table at top of page. The table heading indicates that the values for NO_x, CO and VOC during startup are "lb/hr average over 2 hours," when in fact they are back-calculated from daily emission limits and 22 hrs/day of full load emissions. Daily NO_x and CO limits are not calculated directly from hourly limits. Please revise the table to show actual hourly startup emission limits and note that daily limits for NO_x and CO are lower than 22 hrs/day of full load emissions plus 2 hrs/day of startup emissions, as follows:

Pollutant	Startup Emissions, lb/hr	Full-Load Emissions, lb/hr	Maximum Daily Emissions, lb/day ^a
NO _x	80	16.25	450.0
CO	902	23.75	2,113.0
VOC	16	2.95	96.8
PM ₁₀	N/A ^b	9.00	216.0
SO _x	N/A ^b	3.50	84.0
NH ₃	N/A ^b	24.06	577.4

Notes:

a. Daily emission limits are based on 2 hours of startup and 22 hours of full-load operation per day, with the exception of NO_x and CO. Daily NO_x and CO limits for expansion turbine are identical to daily NO_x and CO limits for existing Pastoria turbines.

b. Hourly PM₁₀, SO_x and NH₃ emissions are the same during startup as during full-load operation.

4. Page 18, NO_x offsets table. PE2 for Qtr3 and Qtr4 should be 40,702 lb/qtr. The rest of the table is correct.

5. Page 26, third paragraph; page 36, second paragraph. Permit condition #49 reads, "District source test staff shall evaluate CEMS results with source test results to assess the accuracy of CEMS during startup events. If, in the judgment of the District source test staff, the reliability of CEMS results has not been demonstrated during startup testing for NO_x and CO..." Please revise p. 26 to be consistent with the condition, as follows: "If, in the judgment of the District source test staff, CEM data is not certifiable reliable to

determine compliance with NOx and CO startup emission limits...” Please revise p. 36 using the same language.

6. The July 8, 2004, amendments to Subpart GG (49 FR 41363) revised the fuel sulfur and nitrogen testing requirements (§60.334), so references to these requirements should be revised to make them consistent with the new requirements.

- a. Nitrogen content testing (Page 26, fifth paragraph; page 27, second paragraph; page 31, Monitoring of Operations)

The current requirement regarding nitrogen content monitoring is as follows:

- (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:
 - (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in § 60.332).

Since the owner/operator does not claim an allowance for fuel bound nitrogen, no nitrogen content monitoring will required.

- b. Pages 31 and 32, Standards for Sulfur Dioxide and Monitoring of Operations.

The second sentence of the third full paragraph (“Recordkeeping and reporting of the fuel sulfur content ...”) should be revised as the cited requirements are now in 60.334(h)(1). The reference in the first sentence of “Monitoring of Operations” should be revised from paragraph (b) to paragraph (h)(1), and the citation should be updated. The reference in the second paragraph should be revised from “paragraph (c)(2)” to “paragraph (j)(2)”, and the citation should be updated.

7. Please correct the typographical error in Condition 35 so that the first sentence of the condition reads as follows:

Emission rates from GTE during combustor tuning shall not exceed any of the following: NOx (as NO₂) 300 lb/hr and 600 lb/period; VOC 48 lb/hr and 96 ~~hours~~ lb/period; and CO 2514 lb/hr and 2514 lb/period.