CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



11-AFC-1

DATE <u>AUG 05 2011</u>

RECD. AUG 05 2011



August 5, 2011

Pio Pico Energy Center, LLC David Jenkins, Project Manager 1293 E. Jessup Way Mooresville, IN 46158

RE: PIO PICO ENERGY CENTER (11-AFC-1), DATA REQUESTS 60 THROUGH 71

Dear Mr. Jenkins,

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

These data requests, numbered 60 through 71, are being made in the technical area of Air Quality. Written responses to the enclosed data requests are due to the Energy Commission staff on or before September 6, 2011, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 651-0966.

Sincerely,

Eric Solorio Siting Project Manager

Enclosure (Data Request Packet, Set 2) cc: Docket (11-AFC-1)

Technical Area: Air Quality

Author: Tao Jiang and Brewster Birdsall

CONSTRUCTION EMISSIONS AND MODELING BACKGROUND

Staff's ongoing review of the construction emission calculations (Appendix G-2) reveals several possible errors. For example, dramatically different fuel use totals are shown in the derivation of total GHG emissions in Table G-2.6 and in the list of equipment units in Table G-2.11 and Table G-2.15, and different numbers of units are shown in Table G-2.15 and Table G-2.16. Staff is not able to verify the accuracy of the calculations without further details.

Response to Data Request 3 does not address staff's request. AFC tables categorize the construction emission sources into onsite construction equipment, fugitive dust, etc. But the modeling files contain 21 sources with generic names (SPMA1, BPMA1, etc). Staff is not able to match the source parameters used in dispersion modeling with the emission sources listed in AFC Table 5.2-14 and Table 5.2-15.

DATA REQUEST

- 60. Please correct the errors in the construction emission calculations and revise all related AFC tables.
- 61. Please provide the worksheets used for construction emission calculations in electronic spreadsheet format, in sufficient form to enable staff to replicate the calculations.
- 62. Please provide a list or table to interpret the sources in the construction dispersion modeling file as they relate to the activities and equipment described in the emission calculations.

CUMULATIVE AIR QUALITY IMPACTS BACKGROUND

Staff's first round of data requests sought correspondence from the San Diego County Air Pollution Control District (the District) that listed sources eligible for inclusion in the cumulative impact analysis. The applicant's Responses to Data Requests 11 and 12 are deficient because they do not explain the various attachments from the District (Exhibits 1A to 1E). An explanation of the rationale for selecting sources or facilities for evaluation in the cumulative impact analysis remains missing.

Response to Data Request 12 says that "the District has recommended" modeling four facilities, but this is without citation or any rationale for why those four were selected. There is no evidence that the District was the party that actually selected the four facilities for cumulative modeling (i.e., Larkspur Energy, Pacific Recovery Corp, Otay Mesa Generating Power Plant, and CalPeak Border). Selecting facilities for cumulative modeling should focus on projects that are likely to adversely affect ambient air quality in areas impacted by the proposed project. For previous cases (see decisions on Lodi Energy Center, 08-AFC-10 and Humboldt Bay Repowering Project, 06-AFC-7), staff focused on new stationary sources that could emit over 10 pounds per day of any

nonattainment pollutant, which is a cutoff that the San Diego Air Pollution Control District uses in requiring emission controls per District Rule 20.3(d).

DATA REQUEST

- 63. Please provide titles, dates, and descriptions for Exhibits 1A to 1E attached with Response to Data Request 11.
- 64. Please tabulate the foreseeable projects that were considered for cumulative impacts modeling and state the rationale for exclusion or inclusion of each (for example, distance, emission threshold, etc.).
- 65. The modeling protocol of AFC Appendix G-8 describes excluding from the cumulative impacts analysis those sources of less than 5 tons per year. Please provide a citation for selecting this level or explain how this level was derived and why a more-stringent threshold of 10 lb/day from District Rule 20.3(d) need not be used.

CUMULATIVE MODELING PROTOCOL BACKGROUND

Response to Data Request 13 describes cumulative impacts of NO₂, PM10, and PM2.5, but other criteria pollutants, CO and SO₂, are not addressed. In addition, the impacts were only assessed at receptors where PPEC project-alone impacts were found to be over the federal Significant Impact Level (SIL), which does not provide a complete analysis as needed for the Staff Assessment. Cumulative impacts should address all criteria pollutants and all nearby receptors. The federal Significant Impact Level is a tool for screening in the federal permitting process (Prevention of Significant Deterioration or PSD). Normally the Energy Commission Staff Assessment discloses cumulative impacts of all pollutants not just those over the SIL. Staff's determination of significance under CEQA is not dependent on a comparison of impacts with the PSD SIL.

DATA REQUEST

- 66. Please provide a cumulative impact analysis in sufficient detail to describe and tabulate the cumulative air quality impacts for CO and SO₂.
- 67. Please include all receptors within the project impact area in the cumulative modeling of all pollutants.

CUMULATIVE MODELING OF OTHER FACILITIES BACKGROUND

Reviewing the dispersion modeling files provided on July 27, 2011 (CD-ROM) reveals certain analytical assumptions or settings that are not well-documented. Cumulative modeling of Otay Mesa Generating Power Plant and Pacific Recovery facilities uses non default in-stack NO₂/NOx ratios for determining 1-hour NO₂. The Otay Mesa Generating Power Plant combustion turbines are modeled with an NO₂/NOx ratio of 0.05, and four landfill gas-fired engines at Pacific Recovery are modeled with an NO₂/NOx ratio of 0.75. These factors are contrary to a default NO₂/NOx ratio of 0.1.

Other questions involve sources selected for cumulative impacts analysis. Cumulative modeling does not include the auxiliary boiler at Otay Mesa Generating Power Plant.

For Pacific Recovery at the Otay Landfill, four sources (engines) are modeled, each with different emission rates for a total of 44.7 tons per year NOx. However, Response to Data Request 11, Exhibit 1C shows an additional facility of 20.7 tons per year NOx at the Otay Landfill. The Energy Commission's Database of California Power Plants (available at: http://energyalmanac.ca.gov/powerplants/index.html) shows two landfill gas-to-energy engines at the Otay Landfill, but response to Data Request 13 shows four.

DATA REQUEST

- 68. Please provide a citation for the NO₂/NOx ratios used in the analysis of the Pacific Recovery and Otay Mesa Generating Power Plant sources or explain how the NO₂/NOx ratios were derived. Rerun the modeling as necessary if the applicant revises the NO₂/NOx ratio or makes any other significant revisions to input or analysis data.
- 69. Please describe how the auxiliary boiler at the Otay Mesa Generating Power Plant would operate and whether operation of the boiler could be simultaneous to other sources operating at Otay Mesa.
- 70. Please include the Otay Mesa auxiliary boiler as part of cumulative modeling.
- 71. Please clarify which sources at the Otay Landfill are included in the cumulative modeling by providing a brief description of each source that illustrates why different and varied stack parameters were used and how the emission rates were derived.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE PIO PICO ENERGY CENTER, LLC

Docket No. 11-AFC-1 PROOF OF SERVICE (Revised 5/12/2011)

APPLICANT

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DECLARATION OF SERVICE

I, <u>Maria Santourdjian</u>, declare that on <u>August 5, 2011</u>, I served and filed copies of the <u>Pio Pico Energy Center Data Requests 60 Through 71</u>, dated <u>August 5, 2011</u>. The original document filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/piopico/index.html].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

FOR SERVICE TO ALL OTHER PARTIES:

(Check all that Apply)

X	sent electronically to all email addresses on the Proof of Service list;
	by personal delivery;
X	by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "email preferred."
AND	
	FOR FILING WITH THE ENERGY COMMISSION:
Х	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (<i>preferred method</i>);
OR	
	depositing in the mail an original and 12 paper copies, as follows:
	CALIFORNIA ENERGY COMMISSION

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Attn: Docket No. 11-AFC-1 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

Originally Signed by
Maria Santourdjian