

November 13, 2003

Ms. Deborah Jordan
Director, Air Management Division
United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Dear Ms. Jordan:

The requirements for public and EPA review of the following proposed Major Facility Review Permit have been completed:

ALAMEDA COUNTY
Roberta Cooper
Scott Haggerty
(Chairperson)
Nate Miley
Shelia Young

Facility #	Facility Name	Application #
B2095	Delta Energy Center, LLC	7068

CONTRA COSTA COUNTY
Mark DeSaulnier
Mark Ross
Gayle Uilkema
(Secretary)

No comments from the public or EPA were received.

The following corrections and changes have been made to the permit as a result of proposed changes and comments from the applicant:

MARIN COUNTY
Harold C. Brown, Jr.

Clarifying Definition of Combustor Tuning Activities

Comment: The proposed definition needs to be broadened to include additional activities based upon Calpine's experience with recent tuning events, discussion with the turbine manufacturer and the District's interpretation of what constitutes tuning activities.

NAPA COUNTY
Brad Wagenknecht

Response: Based upon Calpine's recent experience with combustor tuning activities, the definition has been modified as follows:

SAN FRANCISCO COUNTY
Willie Brown, Jr.
Chris Daly
Jake McGoldrick

All Any testing, adjustment, tuning, and calibration activities recommended by the gas turbine manufacturer to insure safe and reliable steady-state operation of the gas turbines following replacement of the combustor components, during seasonal tuning events, when recommended by the turbine manufacturer, or as 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.

SAN MATEO COUNTY
Jerry Hill
Marland Townsend
(Vice-Chairperson)

SANTA CLARA COUNTY
Liz Kniss
Patrick Kwok
Julia Miller
Dena Mossar

Definition of "Hour"

SOLANO COUNTY
John F. Silva

Comment: In the original Title V operating permit, the District changed the definition of "clock hour" to "hour". This change removed the phrase, "beginning on the hour" from the definition and implied that the hourly average would have to be calculated for every 60-minute period beginning every minute of every hour. We submitted comments on December 17, 2002, explaining why the revised definition is problematic.

SONOMA COUNTY
Tim Smith
Pamela Torliatt

William C. Norton
EXECUTIVE OFFICER/APCO

Response: The purpose of the revised definition was to allow for compliance determinations based upon rolling 60-minute periods. This would insure that determinations of compliance with hourly average emission limits would include

Letter to EPA re Delta Energy Center, LLC

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data points that occur during partial hour operation. As we discussed in our meeting of August 13, 2003, we acknowledge that the DEC data acquisition system can only summarize data for a given clock hour and not on a rolling basis and understand that hourly averages will be calculated for partial operation. In light of this new information, the definition of "hour" has been returned to its original form as shown below:

Hour: Any continuous 60-minute period beginning on the hour.

New Sulfur Content Limit

Comment: The District has added a new sulfur content limit to condition 14 of the permit to operate, which limits the sulfur content of the fuel fired at DEC to 0.25 grains per 100 dry standard cubic feet. We believe these new requirements are not justified, as adequate means exist in the permit to ensure compliance with the cumulative increase requirement, which is cited as the basis for the condition.

Response: This fuel sulfur content limit was included in the original Title V operating permit. As discussed in a meeting with District staff on August 13, 2003, the removal or modification of this limit is considered a significant modification and requires a separate application. This matter will be handled under application 8341, which was received by the District on 9/30/03.

PM10 Emission Limit Applicability at Low Loads

Comment: The PM10 emission rate for each gas turbine/HRSG is 9 pounds per hour and 0.00424 lb/MMBTU for all operating modes based upon the maximum combined firing rate of 2,125 MM BTU/hr. When the gas turbine is fired alone at minimum load (1,329 MM BTU/hr), the corresponding PM10 emission factor is 0.006772 lb/MM BTU. Please increase the allowable PM10 emission factor from 0.00424 lb/MM BTU to 0.006772 lb/MMBTU to cover the minimum load operating scenario.

Response: Because the PM10 emission rate is proportional to heat input, the emission factor of 0.00424 lb/MM BTU should not be exceeded at any firing rate. Because the allowable emission factor is used to calculate daily and annual PM10 mass emissions, the factor cannot be increased without in turn increasing the allowable daily and annual PM10 mass emission limits. Instituting such a change under Title V requires public review and therefore cannot be made after the draft permit has been distributed for public review and comment. The proposed change therefore require a separate permit application.

Monitoring Requirement for S-10 Fire Pump Diesel Engine

Comment: The permit conditions for the S-10 Diesel Engine that are listed in the Title V permit require a fuel flow meter to monitor fuel use. Calpine previously requested that fuel use be monitored at the diesel fuel storage tank. This change was instituted in July of 2001.

Response: The Title V permit contained an incorrect version of permit condition 17999. The current version that includes fuel use monitoring at the fuel storage tank has been added to the Title V permit. Table IV-H has been corrected to reflect the correct fuel use monitoring requirement.

Applicability of New Source Performance Standards

Comment: Please eliminate all references to 40 CFR Part 60, Subpart GG from Tables IV-B, D, and E since it is not applicable to the Heat Recovery Steam Generators.

Response: Because the emissions from each Heat Recovery Steam Generator is combined with the emissions from its corresponding gas turbine, the emissions standards of Subpart GG apply to both sources. This requirement is described in District Regulation 1-107 as follows:

1-107Combination of Emissions: Where air contaminants from two or more sources are combined prior to emission and there are no adequate and reliable means to establish the nature, extent and quantity of emission from each source, District Regulations shall be applied to the combined emission as if it originated in a single source. Such emissions shall be subject to the most stringent limitations and requirements of District Regulations applicable to any of the sources whose air contaminants are so combined.

Subpart GG is considered a “District Regulation” since it has been adopted as a District Regulation by reference under Regulation 10, “Standards of Performance for New Stationary Sources”.

Other Changes/Corrections to the Permit

- The applicable requirements tables for S-4 and S-6 Heat Recovery Steam Generators (Tables IV-D and F) did not indicate that condition #17154, parts 23 and 25 were federally enforceable and incorrectly indicated that part 38 was federally enforceable. The entries have been corrected accordingly.
- An outdated version of permit condition #17999 was listed in the proposed Title V permit. The condition has been corrected to agree with the current version of the condition.
- The applicable requirements table for the S-10 Diesel Engine (Table IV-H) incorrectly referred to a fuel use counter when it should have referred to diesel fuel storage tank monitoring. In addition, condition #17999, parts 2, 3, 4, and 5 were incorrectly designated as federally enforceable when they are not.

The District has made a decision to issue the Major Facility Review Permit.

Enclosed for your information is a copy of the final permit. If you have any questions regarding this project, please call Steve A. Hill, Air Quality Engineering Manager, at (415) 749-4673.

Sincerely yours,

William C. Norton
Executive Officer / APCO

Enclosure
SAH:myl

