



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

California Energy Commission

DOCKETED
12-AFC-03

TN # 70380

APR. 18 2013

April 12, 2013

Stephen O'Kane
Manager
AES Redondo Beach, LLC
690 N. Studebaker Road
Long Beach, CA 90803

Subject: Permit Applications for the Redondo Beach Energy Project, located at
1100 North Harbor Drive, Redondo Beach, CA 90277 (Facility ID# 115536)

Dear Mr. O'Kane:

The South Coast Air Quality Management District (SCAQMD) has received your letter dated March 15, 2013 in response to the information requested in our letter dated February 8, 2013 regarding the permit applications for the Redondo Beach Energy Project (RBEP) received on November 21, 2012. The SCAQMD staff has reviewed your March 15, 2013 letter and other information available to SCAQMD and determined that your applications are not complete and additional information is still needed.

The following additional information is still required:

1. Dispersion Modeling

- Item 4 of our letter dated February 8, 2013 requested an assessment of whether the dispersion modeling performed for this project included the deficiencies identified by SCAQMD planning staff in the dispersion modeling performed for a related project (Huntington Beach Energy Project (HBEP)), and revised dispersion modeling to correct these deficiencies, as required.
- a. Your response was that SCAQMD planning staff required for HBEP a 5-year meteorological dataset for the PSD project (instead of the 3-year meteorological dataset used), and a cumulative analysis of ambient impacts for NO₂ because the dispersion modeling analysis indicated the project will exceed the significance impact level (SIL) for the Federal 1-hour NO₂ standard.
 - i. Your response did not address whether a 5-year meteorological dataset was used for RBEP. The SCAQMD planning staff has indicated that they forwarded to RBEP staff a 5-year meteorological data set and ozone data set (2005-2009) in July 2012. On March 26, 2013, as follow-up, SCAQMD planning staff forwarded to CH2MHill the reprocessed meteorological data using AERMET Version 12345, which was updated in December 2012. Please update the dispersion modeling using this most recent meteorological data file.

- ii. Your response stated that an addendum to the air dispersion modeling protocol to address the cumulative analysis of ambient impacts for NO₂ will be submitted to the SCAQMD. After receiving approval of the protocol and the necessary modeling data from the SCAQMD for nearby emission sources, a revised modeling assessment demonstrating RBEP's compliance with the Federal 1-hour NO₂ ambient air quality standard will be provided by the end of April 2013.

The SCAQMD planning staff's preliminary review of the dispersion modeling provided for RBEP confirms the modeling indicates the project's NO₂ impacts will exceed the Federal 1-hour NO₂ SIL, and therefore a cumulative impact assessment is needed. The addendum to the air dispersion modeling protocol to address the cumulative analysis has not been submitted to the SCAQMD. Please submit a protocol for the cumulative assessment, and upon approval of the protocol, the modeling analysis which is required to include facilities within a 10 km radius.

- b. Further, the SCAQMD planning staff's preliminary review has identified the following additional issues.
 - i. When modeling for NO₂ impacts, applicant used the PVMRM option with an ambient ratio of 0.8. This is not consistent with the Dispersion Modeling Protocol for the Redondo Beach Energy Project dated July 10, 2012, which stated that a ratio of 0.9 would be used (Page 5-1 of Modeling Protocol). Therefore, please re-model all NO₂ impacts with the appropriate ratio.
 - ii. Fugitive dust emissions were modeled with a 1-meter release height. In Tom Chico's comments on the Modeling Protocol set forth in an e-mail dated July 19, 2012, item 8 recommends that fugitive dust emissions should be modeled as a ground-level source, with an initial vertical dimension of 1-meter. Please revise the dispersion modeling accordingly for the construction emissions performed for CEQA purposes.

2. Visibility Analysis

As discussed in our conference call on April 5, 2013 regarding the modeling requirements for the HBEP project, in addition to a visibility analysis for the Class I areas provided, the PSD additional impacts analysis should also consider visibility impacts on Class II areas and impacts as a result of growth associated with the project (i.e., general commercial, residential, industrial and other growth). Please provide a visibility analysis for Class II areas within 50 km of the project.

3. GHG BACT Emissions Rate Calculations

Item 5d requested the revised calculations to be based on MWh net, instead of the MWh gross provided. Your response was the megawatt-hour values referenced in Table AQMD-3 were not used in calculating the RBEP GHG efficiency shown in Table AQMD-5. Table AQMD-5 uses expected operating hours and heat rates to calculate the project's GHG efficiency.

- a. In our meeting on February 21, 2013 to discuss the questions in our letter dated February 8, 2013, you explained that the expected operating profile assumed to derive the emission rate of 1082 lbs CO₂/Megawatt-Hour of gross energy output would result in an estimate of the maximum emission rate. Since this emission rate is based on gross heat rates, please use net heat rates to convert the 1082 lbs CO₂/MWh gross to lbs CO₂/MWh net.
 - b. If the resulting net thermal efficiency exceeds the 1100 lb CO₂/MWh net Greenhouse Gases Emission Performance standard, how do you propose to meet the standard?
4. Application for Oil/Water Separator
In response to item 8, you submitted a Form 400-A and a check for \$5229.18 for an application for an oil/water separator. The \$5229.18 apparently included \$1789.12 for a second RECLAIM/Title V facility amendment application. Since Application No. 545065 will serve as the RECLAIM/Title V facility amendment application for the entire project, \$1789.12 will be refunded. To complete the application, please provide a completed Form 400-E-18--Storage Tanks and emissions calculations.

If you have any questions regarding your permit applications please contact Andrew Lee at (909) 396-2643.

Sincerely,



Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering and Compliance

MN:AYL:JTY:VL

cc: Patricia Kelly, CEC