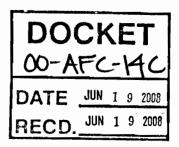


June 19, 2008



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# BY HAND DELIVERY

Steve Munro Project Manager Systems Assessment & Facility Siting Division California Energy Commission 1516 Ninth Street, MS-15 Sacramento, CA 95814

Re: El Segundo Power Redevelopment Project (00-AFC-14C)

South Coast Air Quality Management District's Response to El Segundo Power II LLC's April 18, 2008 Comment Letter on the District's Addendum to the

**Determination of Compliance** 

Dear Mr. Munro:

Please find enclosed for your records, a copy of the South Coast Air Quality Management District's May 16, 2008 response to El Segundo Power II LLC's comment letter on the District's Addendum to the Determination of Compliance for the El Segundo Power Redevelopment Project. The requisite number of copies will also be provided to the Docket Unit for docketing purposes.

Should you have any questions or concerns, please do not hesitate to contact our office at (916) 447-0700.

Very truly yours,

Kimberly Hellwig Senior Paralegal

**Enclosure** 

cc: Mr. Tim Hemig, NRG West

Mr. George Piantka, El Segundo Power II LLC

Mr. Tom Andrews, Sierra Research

May 16, 2008

Mr. Tim Hemig Director, Environmental Business NRG West 1817 Aston Avenue Suite 104 Carlsbad, CA 92008

Subject:

Response to comment letter dated April 18, 2008 for the Addendum to the Determination of Compliance for the El Segundo Power Redevelopment Project (ESPR); Location: 301 Vista Del Mar, El Segundo, CA 90245; Facility ID No. 115663

Dear Mr. Hemig:

Thank you for the April 18, 2008 comment letter regarding the above described project in which ESPR filed applications for a Title V Permit to Construct with the South Coast Air Quality Management District (AQMD). As you know, ESPR has proposed to install and operate a 573 megawatt (MW) natural gas fired power plant located at the facility location shown above. During the 30-day public comment period, ESPR provided comments on the proposed Title V permit for the above facility. Below is AQMD's response to those comments:

#### Comment No. 1

ESPR requests that AQMD change the engineering evaluation and draft DOC and Title V permit such that the appropriate Rule 1309.1 mitigation fees are determined according to the provisions of Rule 1309.1(g)(1)(A) instead of Rule 1309.1(g)(1)(B).

## **AQMD** Response

AQMD has addressed this issue and has provided clarification on this matter in an email from AQMD to ESPR dated May 11, 2007. In summary, this email states that based on AQMD's evaluation of the proposed project modification and discussions with AQMD Counsel, ESPR was required to submit new applications for modifications to the initial proposal and AQMD would perform a new engineering analysis and determination of compliance (DOC) for the proposed project. Based on the discussions with AQMD Counsel, AQMD Management and ESPR, the criteria for qualifying as an Electrical Generating Facility (EGF) is based on the version of Rule 1309.1 in effect at the time the application is deemed complete, the criteria for accessing the Priority Reserve (PR) and the cost of PR credits would be in accordance with the version of Rule 1309.1 in effect at the time of issuance of the Title V permit. Therefore, the cost of the PR credits per pound will be based on the provisions of Rule 1309.1(g)(1)(B), as follows: PM10: \$92,000, SOx: \$34,400.

#### Comment No. 2

Designate gas turbines as Unit No. 5 and Unit No. 6 respectively, rather than as Unit No. 8 and Unit No. 9. The AQMD prepared this draft Title V permit as an amendment to the initial DOC which was dated February 14, 2002, which referenced Unit No.'s 5 and 7. Those units were not issued a Permit to Construct nor were constructed.

## AQMD Response:

The initial DOC prepared on February 14, 2002 referenced the previously proposed General Electric gas turbines as Units No. 5 and 7. These units were never issued a Permit to Construct by AQMD because ESPR elected to further modify the facility with newer gas turbines manufactured by Siemens-Westinghouse and eliminate the once-through cooling. The proposed gas turbines manufactured by Siemens-Westinghouse will be continue to be designated in the permit as units 5 and 7 respectively however, the device ID numbers will be changed to preserve the program history.

## Comment No. 3

The aqueous ammonia storage tank (Device D30) is an existing permit unit that is not being modified as part of the ESPR project. However, the draft amended DOC includes a new emission control system for this permit unit (a two-stage scrubber, Device C64). Since this permit unit is not being modified and is not currently equipped with this control device, we request this control equipment be removed from the DOC.

## AOMD Response:

Since the breathing and working losses associated with the ammonia storage tank have the potential to emit greater than 1 lb/day of ammonia, BACT is required for this tank. BACT consists of a pressure relief valve and the venting of the vapors during filling operations to the vessel from which the tank is being filled. Both of these requirements are contained in conditions C157.1 and E144.2 which are currently listed in the permit. Therefore, the two stage venturi scrubber described as Device D64 need not be installed and will be removed from the draft permit.

#### Comment No. 4

Permit Condition A99.7 limits the commissioning period to 415 hours per gas turbine per year. It also includes exemptions from the NOx limit of 2.0 ppm during commissioning, start-ups, and shutdowns. With regards to the commissioning period, we request (a) that the condition clarify that the 415 hour limit refers to gas turbine operating hours, (b) ESPR requests an exemption from the NOx ppm limit during combustor tuning, and (c) ESPR requests a set of exemptions from the NOx permit limit during NOx excursions which occur due to sudden gas turbine load changes.

## **AQMD Response:**

- (a) ESPR has requested that condition A99.7 be revised to clarify that the 415 hour commissioning period limitation refer only to operational hours. In order for AQMD to consider this request, ESPR will need to provide AQMD with a specific definition of what constitutes "operational hours" during the commissioning period. This definition will be incorporated into permit condition A99.7.
- (b) With regards to ESPR's request for exemption from the 2.0 ppmv NOx BACT limit during periodic combustor tuning, ESPR will need to provide AQMD with a specific definition of combustor tuning (as defined by the turbine manufacturer), and a proposed schedule of combustor tuning and the proposed duration of the tuning activities, both as defined by the manufacturer. Upon submittal of this information, AQMD will review and consider ESPR's request.
- (c) ESPR has also requested a set of exemptions from the NOx permit limit during NOx excursions specifically during sudden gas turbine load changes. In 2003, AQMD considered and granted this request to other facilities such as Inland Empire Energy Center due to the fact that BACT for NOx was in the process of being adjusted and was not officially set at 2.0 ppmv during all periods of operation. Therefore, during certain periods, the facility was allowed to comply with the official limit of 2.5 ppmv, which was the basis for the excursion language. However, at this time the 2.0 ppmv NOx emission limit is BACT for all periods except as specifically defined in condition A99.7. As a courtesy, AQMD may however, consider ESPR's request at a later time after which the equipment is operational and can submit actual data to AQMD which demonstrates that during such load changes it is not possible for the equipment to comply with this requirement.

#### Comment No. 5

As with the changes requested to the NOx BACT limit, ESPR requests that the commissioning period defined in condition A99.8 and A99.9 be clarified to refer to operational hours and also request an exemption from the CO and VOC limits due to combustor tuning. ESPR also requests that all ROG references be changed to VOC for consistency purposes.

## **AOMD Response:**

See responses (a) and (b) to Comment No. 4 above. AQMD will revise draft permit to refer to "VOC" rather than "ROG" for consistency, as appropriate.

#### Comment No. 6

ESPR requests that Condition A433.1 refer to Permit Condition A99.7 rater than A99.1. In addition, ESPR requests that the NOx emission limit be corrected to 112 lb/hr rather than 112 lb/day to match the information provided in the permit application. Finally, ESPR requests that the annual number of start-ups per year be corrected to 200 start-ups per year rather than 100 start-ups per year to match the information in the permit application.

#### **AQMD Response:**

AQMD concurs with these requests and will revise the permit accordingly.

## Comment No. 7

ESPR requests condition D12.11 be deleted. If AQMD insists that condition D12.11 be retained, then ESPR requests that the aqueous ammonia injection rate limits in this condition be changed from between 13.5 to 16.5 gallons per hour to between 4.8 to 11.5 gallons per hour, based on a density of 8.3 lb/gallon.

## AQMD Response:

Condition D12.11 cannot be deleted. However, AQMD concurs with ESPR's request for the change in injection rate and will revise the permit accordingly.

#### Comment No. 8

ESPR requests condition D12.12 be deleted. If AQMD insists that condition D12.12 be retained, then ESPR requests that the SCR operating temperature limits in this condition be changed from between 450 to 750 degrees F to between 400 and 750 degrees F to be consistent with the information supplied by the manufacturer.

#### **AOMD Response:**

Condition D12.12 cannot be deleted. However, AQMD concurs with ESPR's request for the change in SCR operation temperature range and will revise the permit accordingly.

#### Comment No. 9

ESPR requests that the SCR pressure drop limits in condition D12.13 be changed from between 5 to 7.5 inches of water to between 1 to 4 inches of water, to be consistent with information supplied from the manufacturer.

## AQMD Response:

AQMD concurs with the request for the change in the SCR pressure drop limits and will revise the permits accordingly.

## Comment No. 10

ESPR requests that the requirements to comply with all California Energy Commission (CEC) mitigation measures as defined in Permit Condition E193.2 be clarified to refer to "air quality" mitigation measures. As written, this condition would require compliance with non-air quality related mitigation measures, including noise, visual, land use, water quality, and cultural resources.

## AQMD Response:

AQMD concurs with the request and will revise the permit accordingly.

## Comment No. 11

ESPR requests that the following additional language be added to Permit Condition E193.3, as allowed by AQMD Rule 1309.1: "The Governing Board may grant additional time extensions based upon a demonstration by the applicant that the extension is necessary due to circumstances beyond the reasonable control of the applicant."

## AQMD Response:

AQMD concurs with the request and will revise the permit as it reflects the rule language.

If you have any questions regarding this project, please contact Mr. Kenneth L. Coats at (909) 396-2527 <a href="mailto:kcoats@aqmd.gov">kcoats@aqmd.gov</a> or Mr. John Yee at (909) 396-2531 <a href="mailto:jyee@aqmd.gov">jyee@aqmd.gov</a>.

Sincerely,

Michael D. Mills, P.E.

Senior Manager

General Commercial & Energy Team

Michael D. Mills

Engineering & Compliance

cc: Mr. George L. Piantka, El Segundo Power, LLC Engineering File

CERTIFIED MAIL/RETURN RECEIPT REQUESTED