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DOCKET

08-AFC-10

DATE NOV 13 2009
RECD NOV 13 2009

November 13, 2009

California Energy Commission Docket Unit 1516 Ninth Street Sacramento, CA 95814-5512

Subject: NORTHERN CALIFORNIA POWER AGENCY'S WITHDRAWAL OF

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT

APPLICATION FOR LEC DOCKET NO. (08-AFC-10)

Enclosed for filing with the California Energy Commission is the original copy of the NORTHERN CALIFORNIA POWER AGENCY'S WITHDRAWAL OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT for the Lodi Energy Center (08-AFC-10).

Sincerely,

Marie Mills

Mani Villa



651 Commerce Road Roseville, CA 95678 (916)781-3636 www.ncpa.com

November 13, 2009

Gerardo Rios U.S. Environmental Protection Agency Air Permits Office (AIR-3) 75 Hawthorne Street San Francisco, CA 94105

Subject: NCPA Lodi Energy Center, SJVAPCD Project No. N-1083490

In September 2008, we submitted to EPA an application for a Prevention of Significant

Withdrawal of PSD Permit Application

Dear Mr. Rios:

Deterioration (PSD) permit for the Northern California Power Agency's (NCPA) proposed new Lodi Energy Center. The project will consist of one natural gas-fired combined-cycle combustion turbine with fired heat recovery steam generator, one natural gas-fired auxiliary boiler, and one mechanical draft wet cooling tower, to be installed adjacent to NCPA's existing CT#2 project in Lodi, CA. Additional supporting information was submitted in October 2008; January 2009 (addition of PM₁₀ to the PSD permit); July 2009 (change in generating equipment from General Electric 7FA Rapid Response to Siemens Flex Plant 30); August 2009 (reduction in CO emissions to 2 ppm); and September 2009 (additional impacts analysis and evaluation of BACT for cooling tower).

In the process of preparing the draft Final Determination of Compliance for the project, the San Joaquin Valley Air Pollution Control District (District) staff determined that the startup period for the proposed gas turbine/HRSG should be limited to a maximum of three hours instead of the six hours that we were using in our calculation of emissions from the project. This reduction in startup times, combined with the reduction in CO emissions to 2 ppm, will reduce CO emissions from the project to the point where NCPA can now propose an annual CO emissions limit of 99 tons per year for the LEC. With this annual CO limit, emissions of all pollutants from the new facility will be below 100 tons per year and PSD review will no longer be required. Therefore, we are withdrawing our application for a PSD permit and will accept a federally-enforceable annual CO limit in our District permit.

The following tables compare emissions from the existing CT#2 and proposed LEC sources with applicable PSD major source thresholds to demonstrate that with the LEC project will not be subject to PSD review. Emissions from the existing NCPA Lodi facility are compared with major source thresholds to determine whether the existing facility is a major source. This comparison is made in Table 1.

TABLE 1
STIG Plant Emissions and PSD Major Source Thresholds

Pollutant	NCPA Lodi CT#2 Emissions (tpy)	PSD Major Source Thresholds [*] (tpy)	Major?	
NO _x	20.4	100	No	
SO ₂	5.7	100	No	
CO	58.8	100	No	
PM ₁₀	8.8	100	No	

^{*} Major source thresholds based on the assumption that the CT#2 simple-cycle STIG turbine with a heat recovery steam generator but no steam turbine is a "fossil fuel-fired steam electric plant" pursuant to 40 CFR 52.21(b)(1)(i)(a).

Since the existing CT#2 project is not a PSD major source, maximum potential emissions from the LEC are compared with the PSD major source significance thresholds to determine whether the modification itself is major and thus may be subject to PSD. If the facility emissions exceed these thresholds, the proposed modification is subject to PSD review. The comparison in Table 2 indicates that the all emissions from LEC are below the major source thresholds for the applicable source category, and thus the project is not subject to PSD review.

TABLE 2LEC Proposed Emissions and PSD Major Source Thresholds

	LEC Emissions	PSD Major Source	
Pollutant	(tpy)*	Thresholds (tpy)	Major?
NO _x	76.3	100	No
SO ₂	26.9	100	No
CO	99.0	100	No
PM ₁₀	44.1	100	No

^{*}LEC emissions include CTG/HRSG, auxiliary boiler and cooling tower.

The attached calculations show the assumptions used in determining that CO emissions could be limited to 99.0 tons per year without overly constraining LEC's operations.

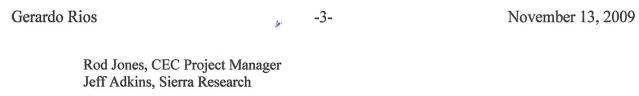
If you have any questions regarding our decision to withdraw the PSD application, please do not hesitate to call me or Jeff Adkins of Sierra Research at (916) 444-6666.

Sincerely,

Ed Warner

attachment

cc: Manny Aquitania, EPA Region 9
David Warner, SJVAPCD



Attachment Revised Calculation of Potential Annual CO Emissions

Table 5.1A-6R of Supplement D showed a calculation of annual CO emissions from the proposed project at 261.0 tons per year (258.4 tpy from the gas turbine/HRSG; 2.7 tpy from the auxiliary boiler). This calculation was based upon the following assumptions:

156 hot starts/yr @ 2 hours/start and 900 lb CO/hour 26 cold starts/yr @ 6 hours/start and 900 lb CO/hour 6,732 base load hours/yr @ 14.19 lb/hr (3 ppmvd @ 15% O₂)

Since Supplement D was submitted, the SJVAPCD has made two new BACT determinations related to CO emissions from the project. First, the permitted CO emission rate for baseload operation is being reduced from 3 ppm to 2 ppm, reducing baseload emissions from 14.19 lb/hr to 9.46 lb/hr. Second, the maximum allowable time for each startup has been reduced from 6 hours to 3 hours in the draft permit.

Following these changes in operational restrictions, NCPA reevaluated the assumptions used in calculating annual emissions and determined that less conservative, more realistic assumptions could be made *on an annual average basis* that would allow a reduction in total annual CO emissions for the project to under 99 tons per year. These revised assumptions are:

156 hot starts/yr @ 1 hour/start and 500 lb CO/hour 26 cold starts/hr @ 3 hours/start and 500 lb CO/hour 7,590 base load hours/yr @ 9.46 lb/hr

Using these assumptions, annual CO emissions from the gas turbine/HRSG would be 94.4 tpy. With the additional 2.7 tpy of CO from the auxiliary boiler, total annual CO emissions from the project would be 97.1 tpy, below the 99 tpy limit that will be included in the SJVAPCD's final permit.



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

1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 - <u>www.energy.ca.gov</u>

APPLICATION FOR CERTIFICATION FOR THE *Lodi Energy Center*

DOCKET NO. 08-AFC-10

PROOF OF SERVICE (Revised 2/17/09)

APPLICANT

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DECLARATION OF SERVICE

I, Robert A. Gladden, declare that on November 13, 2009, I served and filed copies of the attached **NORTHERN CALIFORNIA POWER AGENCY'S WITHDRAWAL OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) PERMIT APPLICATION FOR LEC** dated **November 13, 2009**. 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:

[www.energy.ca.gov/sitingcases/lodi/index.html].

The document has 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:

(Chec	k all that Apply)				
For service to all other parties:					
X	sent electronically to all email addresses on the Proof of Service list;				
X	by personal delivery or by depositing in the United States mail at <u>Sacramento, California</u> with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses NOT marked "email preferred."				
AND					
For filing with the Energy Commission:					
X	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 Attn: Docket No. <u>08-AFC-10</u> 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512				

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

/Original signed / Robert A. Gladden