Dear Librarian:

CALIFORNIA ENERGY COMMISSION

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



December 30, 2009

DATE DEC 30 2009

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DOCUMENT HANDLING FOR LODI ENERGY CENTER PROJECT (08-AFC-10)

The enclosed Staff Assessment (SA) contains the California Energy Commission staff's engineering and environmental evaluation of the proposed Project. Please make this SA available to those who may wish to be informed about the project. We request that you not allow the SA or any of its contents to be removed from the library. To increase accessibility of the document, we ask, if possible, that you cross reference it as a general reference work under the title and author categories, as well as under such subjects as "Energy Commission," "electricity energy/generation," "power plant siting," or any other relevant subject. Please retain the enclosed letter to the public behind the front cover of the SA.

The Energy Commission's siting process is open to the public and incorporates the input of the public as well as local, state and federal agencies. To facilitate public participation in our review process, the Commission distributes copies of staff documents such as the SA to public libraries in communities near the proposed project, and in major cities throughout the state.

Thank you for your cooperation. If you have any questions, please contact Rod Jones, Project Manager, at (916) 654-5191, or by e-mail at: riones @energy.state.ca.us

Sincerely,

Signed by Robert Worl for EA

Eileen Allen

Siting and Compliance Office Manager

Enclosure

CALIFORNIA ENERGY COMMISSION

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



December 30, 2009

To: MEMBERS OF THE PUBLIC

PUBLIC PARTICIPATION IN THE REVIEW OF LODI ENERGY CENTER PROJECT STAFF ASSESSMENT (08-AFC-10)

The enclosed Staff Assessment (SA) contains the California Energy Commission staff's engineering and environmental evaluation of Lodi Energy Center (LEC). Staff concludes that with staff's recommended conditions of proposed certification, the LEC would comply with all applicable laws, ordinances, regulations and standards (LORS). Staff also concludes the project would avoid significant adverse direct, indirect or cumulative impacts. The most significant issue is summarized as follows:

 Air Quality - Energy Commission staff's analysis of the project determined that the LEC project would not result in significant air quality related impacts. However, at this time, staff cannot determine whether the LEC project would conform to applicable LORS until staff receives and evaluates the Final Determination of Compliance (FDOC) from the San Joaquin Valley Air Pollution Control District (SJVAPCD). The public review period for the draft FDOC will close at the end of December followed by the issuance of the final FDOC by SJVAPCD in late January 2010. Assuming staff determines the FDOC to be in compliance with applicable LORS relating to the LEC project, staff will then amend the SA via errata which will later be adopted by the Energy Commission during a public hearing.

Background

On September 10, 2008, Northern California Power Agency (NCPA) submitted an Application for Certification (AFC) to construct and operate the LEC project. The LEC project would be a combined-cycle, nominal 296-megawatt (MW), generating facility. The proposed project would be located on 4.4 acres of land owned and incorporated by the city of Lodi, 6 miles west of the Lodi city center, located near Interstate-5 (I-5) approximately 1.7 miles south of State Route 12. The LEC would be designed to meet NCPA's participant members electricity needs. Primary equipment for the generating facility would be one Siemens Flex combustion turbine-generator installed in Flex Plant 30 configuration, equipped with dry low nitrogen oxide (NO $_{\rm X}$) combustors for the control of NO $_{\rm X}$, an evaporative cooler for reducing inlet air temperatures; one heat recovery steam generator (HRSG), selective catalytic reduction (SCR) and oxidation catalyst equipment to control NO $_{\rm X}$ and carbon monoxide (CO) emissions, respectively, condensing steam turbine generator (STG), a deaerating surface condenser, a 7-cell mechanical draft cooling tower, a small auxiliary boiler and associated support equipment.

Construction laydown and parking areas will be within the existing site boundaries of the White Slough Pollution Control Facility (WPCF) property owned by the city of Lodi. Four

parcels totaling 9.8 acres will be used for both construction and laydown areas. Construction access will be from North Cord Road.

The proposed LEC facility will connect to the power grid through the existing Combustion Turbine Project #2's (CTP#2) 230-kV switchyard by an approximately 520 foot long three-phase 230-kV transmission line.

Natural gas will be delivered to the project through an offsite natural gas supply pipeline that will parallel Pacific Gas and Electric's natural gas pipeline #108 serving the existing CTP #2 plant, adjacent to the proposed LEC project. The gas pipeline will be approximately 2.7 miles in length, and will run eastbound in a utility easement, and will tap into the existing PG&E high-pressured natural gas supply line.

The LEC will receive recycled water provided by the city of Lodi's WPCF via a new pipeline that will be located immediately adjacent to the existing pipeline serving CTP #2. Sanitary and sewer connection will also be provided through existing connections into the WPCF. Potable water or sanitary and domestic use will be provided by new onsite potable water well. The LEC facility will produce no non-reclaimable process wastewater. LEC will dispose of process wastewater using a new Class I underground injection well (UIW) and will have access to the CTP #2 Class I UIW for backup. On an annual basis LEC will utilize 856 gallons per minute (GPM) or 1,380 acre-feet per year (AFY), assuming full-time operation at 8,760 hours per year. The facility will be frequently dispatched and will operate on the order of approximately a 76 to 82% annual capacity factor. Water treatment will be provided on site using reverse osmosis (RO) and demineralizer systems. Highpurity water will be stored in an approximately 200,000-gallon dimineralized water storage tank.

Air emissions from the combustion of natural gas in the combustion turbine generators (CTGs) for the Heat Recovery Steam Generator (HRSG) will be controlled using best available control technology applied to the exhaust. The CTG will exhaust to a HRSG which includes an anhydrous ammonia type selective catalytic reduction system for control of nitrogen oxide (NO_x). Catalysts for both NO_x and carbon monoxide will be included in the HRSG system for the reduction of harmful air emissions at the stack. One (1) Continious Emissions Monitoring (CEMS) system will be provided. In order to be considered for licensing by the Energy Commission, the project must conform to rules and regulations of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and be issued a Final Determination of Compliance (FDOC) from the Air District. On November 19, 2009, the SJVAPCD issued a draft FDOC with a public comment period in order to discuss the new proposed equipment (Siemens turbines) change.

The Energy Commission is responsible for reviewing and ultimately approving or denying all applications for construction and operation of thermal electric power plants, 50 MW and greater, proposed for construction in California. The Energy Commission's facility certification process carefully examines public health and safety, environmental impacts and engineering aspects of proposed power plants, and all related facilities such as

electric transmission lines and natural gas and water pipelines. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA), and produces several environmental and decision documents rather than an Environmental Impact Report.

The SA contains the Energy Commission staff's environmental and engineering evaluation of the LEC project and will serve as staff's testimony during evidentiary hearings. The Energy Commission Committee assigned to the LEC proceedings will consider and weigh the testimony, comments, or recommendations of all interested parties, including Energy Commission staff, the applicant, intervenors, the public, and other local, state, and federal agencies, before issuing the Presiding Member's Proposed Decision (PMPD) for consideration by the full Energy Commission. The public, intervenors, local, state and federal agencies are encouraged to participate in these hearings. The Energy Commission has scheduled the hearings for January 5, 2010, time and location to be announced in a separate notice.

If you desire information on participating in the Energy Commission's review of the project, please contact the Energy Commission Public Adviser's Office, at (916) 654-4489 toll free in California at (800) 822-6228, or by email at pao@energy.state.ca.us. Technical or project schedule questions should be directed to Rod Jones, Energy Commission Project Manager, at (916) 654-5191, or by email at rjones@energy.state.ca.us. If you need reasonable accommodation in terms of assistance, please contact Lourdes Quiroz of the Administrative Services Division at (916) 654-5146, or e-mail at lquiroz@energy.state.ca.us. The status of the project, copies of notices and other relevant documents are also available on the Energy Commission's Internet web site at http://www.energy.ca.gov/sitingcases/victorville2. News media inquiries should be directed to the Media Office, at (916) 654-4989, or by email at: mediaoffice@energy.state.ca.us.

Note: Please retain this letter behind the front cover of the SA. Thank You.



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

Ken Speer Assistant General Manager Northern California Power Agency 651 Commerce Drive Roseville, CA 95678 ken.speer@ncpagen.com

Ed Warner
Project Manager
Northern California
Power Agency
P.O. Box 1478
Lodi, CA 95241
ed.warner@ncpagen.com

APPLICANT'S COUNSEL

Scott Galati Galati Blek 455 Capitol Avenue, Ste. 350 Sacramento, CA 95814 sgalati@gb-llp.com

APPLICANT'S CONSULTANT

Andrea Grenier Grenier & Associates, Inc. 1420 E. Roseville Pkwy, Ste. 140-377 Roseville, CA 95661 andrea@agrenier.com

Sarah Madams CH2MHILL 2485 Natomas Park Drive, Ste. 600 Sacramento, CA 95833 smadams@ch2m.com

APPLICANT'S ENGINEER

Steven Blue Project Manager Worley Parsons 2330 E. Bidwell, Ste. 150 Folsom, CA 95630 Steven.Blue@WorleyParsons.com

INTERESTED AGENCIES

California ISO <u>e-recipient@caiso.com</u>

INTERVENORS

Karen Douglas Chairman and Presiding Member kldougla@energy.state.ca.us

Jeffrey D. Byron Commissioner and Associate Member jbyron@energy.state.ca.us

ENERGY COMMISSION

Kenneth Celli Hearing Officer kcelli@energy.state.ca.us

Rod Jones Project Manager rjones@energy.state.ca.us Melanie Moultry Staff Counsel MMoultry@energy.state.ca.us

Elena Miller
Public Adviser
publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, <u>April Albright</u>, declare that on <u>January 4, 2010</u>, I served and filed copies of the attached <u>Library Document Letter for the Staff Assessment; Notice of Availability of the Staff Assessment; and Request for Agency Comments on the Staff Assessment, dated <u>December 30, 2009</u>. The original documents, filed with the Docket Unit, are accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:</u>

[www.energy.ca.gov/sitingcases/lodi]. 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:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

	TOR SERVICE TO ALL OTHER TARTIES.
<u>√</u>	sent electronically to all email addresses on the Proof of Service list;
	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:	
	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);
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 by: April Albright
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