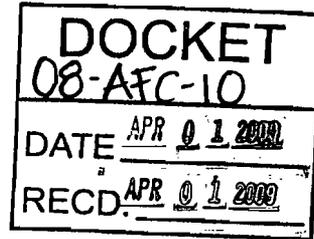


April 1, 2009

Ms. Angela Hockaday  
California Energy Commission  
Docket Unit  
1516 Ninth Street  
Sacramento, CA 95814-5512



**Subject: NORTHERN CALIFORNIA POWER AGENCY'S  
LODI ENERGY CENTER APRIL STATUS REPORT  
DOCKET NO. 08-AFC-10**

Dear Ms. Hockaday:

Enclosed for filing with the California Energy Commission is the original of **NORTHERN CALIFORNIA POWER AGENCY'S Lodi Energy Center APRIL STATUS REPORT**, for the Lodi Energy Center (08-AFC-10).

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Gladden".

Robert Gladden  
Counsel to NCPA

Scott A. Galati  
Robert Gladden  
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455 Capitol Mall  
Suite 350  
Sacramento, CA 95814  
(916) 441-6575

STATE OF CALIFORNIA  
Energy Resources  
Conservation and Development Commission

In the Matter of:

Application for Certification for the Lodi  
Energy Center

**DOCKET NO. 08-AFC-10**

**LODI ENERGY CENTER APRIL  
STATUS REPORT**

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The Northern California Power Agency (NCPA) submits this April Status Report to update the Committee on the progress related to the processing of its Lodi Energy Center.

**SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT**

NCPA submitted an Application for Determination of Compliance review to the San Joaquin Valley Air Pollution Control District (SJVAPCD) on September 5, 2008. It was deemed complete on October 2, 2008. Unlike many applicants, NCPA owns all of the Emission Reduction Credits (ERCs) necessary to operate the LEC.

During the months of October through January, NCPA responded with additional information requested by the SJVAPCD Staff. Recent conversations with the SJVAPCD indicate that the SJVAPCD does not require any additional information and that the Preliminary Determination of Compliance (PDOC) should be issued any day now. NCPA has urged the SJVAPCD to release the PDOC soon so that the CEC Staff can timely publish its Preliminary Staff Assessment.

**BIOLOGICAL RESOURCES**

At the time of the Site Visit and Informational Hearing, CEC Staff was concerned that an area of the site might be a jurisdictional wetland. After further investigation and consultation with the US Army Corps of Engineers, additional evidence that the area is not a jurisdictional wetland was provided. NCPA believes this resolves the issue.

## AMMONIA DELIVERY

At the Site Visit and information Hearing, Hearing Officer Celli requested more information concerning the potential for increased deliveries of ammonia to the site with the addition of the LEC. NCPA added this query and its response to the Second Set of Data Responses, docketed on February 16, 2009. However, this particular response is included here as well to further inform the Committee.

WSQ-1 Since the LEC will use the existing ammonia tank at the STIG plant, and will therefore result in an increase in ammonia deliveries, would increased ammonia storage result in fewer ammonia deliveries to the site? If storage cannot be increased is there any mitigation proposed to address the additional truck trips?

**Response:** The LEC facility will tie into the existing anhydrous ammonia (99% NH<sub>3</sub>) in an existing single stationary aboveground storage tank (AST) currently in use at the STIG Plant. A new ammonia tank will not be built for the LEC facility. The capacity of the tank is 12,000 gallons; however, the tank is only filled to 85% of its capacity, or 10,200 gallons.

Currently, the existing anhydrous ammonia tank is refilled once a year for the STIG facility. With the addition of the LEC facility, deliveries will increase to two times per month, with a maximum of 24 deliveries per year. Thus, approximately two times per month (or a maximum of 24 deliveries per year), one 6,500-gallon tanker truck will deliver anhydrous ammonia to the site.

The limiting factor for ammonia deliveries to the LEC site is not the number of storage tanks onsite, but the size of the tanker truck that delivers the anhydrous ammonia. Typical deliveries of ammonia to the STIG plant are in a 6,500-gallon tanker truck. During operation, regardless of the number of tanks onsite, 24 deliveries would still be needed per year for the LEC to operate as described in the Application for Certification (AFC). Two tanks onsite would not reduce the amount of deliveries, as the tanks could only be filled 6,500 gallons at a time. The only way to decrease ammonia deliveries would be to decrease the amount of hours the plant would operate, thereby decreasing the amount of ammonia needed.

As detailed in AFC Section 5.5 and Section 5.12, transportation of hazardous materials, including anhydrous ammonia, will comply with all Caltrans, USEPA, DTSC, CHP, and California State Fire Marshal regulations. Anhydrous ammonia will be delivered and transported in accordance with Vehicle Code Section 32100.5, which regulates the transportation of hazardous materials that pose an inhalation hazard. In addition, ammonia will only be transported along approved transportation routes.

A transportation risk analysis was also prepared for this project to determine the risk of delivering ammonia to LEC (Appendix 5.5A of the AFC). The risk of an incident occurring during a calendar year that would result in 10 or more fatalities is 0.017/million miles x 73.9 miles, or 1.26 in one million. The risk of an accident occurring in any year that would result in 33 or more fatalities is 0.0027/million miles x 73.9 miles, or 0.20 in

one million. The CEC uses a significance threshold of 1 in 100,000 (or 10 in 1,000,000) for a risk of 10 fatalities and a threshold of 1 in 1,000,000 for a risk of 100 fatalities (CEC, 2001). Both of the project's risk estimates (1.26 and 0.20 in one million) are well below the CEC thresholds. Therefore, the risk of exposure to anhydrous ammonia during transport to the LEC site is not significant.

Transportation impacts related to hazardous materials associated with the project operations will not be significant since deliveries of hazardous materials will be limited. Delivery of these materials to the LEC facility will occur over prearranged routes that avoid schools, hospitals, and other sensitive receptors and will be in compliance with all LORS governing the safe transportation of hazardous materials. Because the transport of hazardous wastes will be conducted in accordance with the relevant transportation regulations, no significant impact is expected. Thus, even with increased truck trips, no mitigation is required for the LEC facility.

## **WATER QUALITY**

At the Site Visit and information Hearing, Hearing Officer Celli requested more information concerning the use of the Underground Injection Well. NCPA added this query and its response to the Second Set of Data Responses, docketed on February 16, 2009. However, this particular response is included here as well to further inform the Committee.

**WSQ-2** Since the LEC is adjacent to a waste water treatment plant, why will the facility use an underground injection well, and is a ZLD an option? Due to the close proximity of the Delta and waterways, would an underground injection well impact these waters?

**Response:** LEC is unable to send process water back to the City of Lodi's White Slough Water Pollution Control Facility (WPCF) due to the high level of salinity in the water, which exceed the limit that the WPCF can accept. A ZLD system, while in place at other project sites, would require a larger footprint for the LEC. Since the LEC site is landlocked with WPCF treatment ponds to the north and east, the existing STIG facility to the west, and the San Joaquin County Vector ponds to the south, additional acreage is not possible. Therefore an underground injection well for disposal of process water will be used at the LEC site. The STIG plant has an existing permitted Class I underground injection well (UIW) that is currently in use and will be used as a backup for the new UIW to be installed for the LEC project.

UIWs inject wastes into deep, isolated rock formations that are thousands of feet below the lowermost underground source of drinking water (USDW). Regulated by the EPA's Underground Injection Control (UIC) program, Class I injection wells provide a safe means to remove wastes from the surface environment by isolating them deep below the land surface, away from drinking water resources (EPA, 2008<sup>1</sup>). Owners and

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<sup>1</sup> Environmental Protection Agency (EPA). 2008. Underground Injection Control Program. [http://www.epa.gov/safewater/uic/wells\\_class1.html#what\\_is](http://www.epa.gov/safewater/uic/wells_class1.html#what_is)

operators of Class I wells must meet specific requirements to obtain a permit from EPA. These requirements address the siting, construction, operation, monitoring and testing, reporting and record keeping, and closure of Class I wells. Wastewater from the LEC will be discharged to a new onsite Class I UIW. This well will be permitted through the EPA's UIC program, which strictly regulates the conditions on which a permit for Class I injection wells can be issued.

The primary concern of the UIC program is the potential for injected fluid or poor quality native formation fluids to move from the injection interval due to inadequate confinement or the presence of natural or manmade conduits. Examples of natural conduits include transmissible faults or fractures that penetrate the confining zone. Man-made conduits at this depth are generally wells that may not be properly constructed and/or plugged to prevent movement of fluids from deeper zones to shallower zones.

As described in the UIC permit package there are two aquifers in the LEC project area. The upper aquifer is perched on top of an impervious zone and is found at depths of 2 to 14 feet and the lower aquifer begins at a depth of about 50 feet. The UIW will inject into the Domengine Formation at depths of between 4,234 and 4,507 feet. Injection zones typically range from 1,700 to more than 10,000 feet in depth (EPA, 2008). The injection zone is separated from USDWs by an impermeable "cap" rock called the confining layer, along with additional layers of permeable and impermeable rock and sediment that separate the injection layer from the USDW (EPA, 2008). At the LEC UIW site, the presence of the extensive confining unit will prevent the formation fluids from moving between zones.

Based on the calculations summarized in the UIW permit, the injection front is expected to travel less than 1,800 feet from the injection well. These calculations assume 24 hour per day, 365 days per year of injection for 30 years at 425 gallons per minute. It is not expected that operation at full capacity will occur at all times, which will result in lower rates than the proposed permitted values, resulting in significantly less pressure than calculated based on the assumptions above. Even in the worst case scenario described above, migration of the injection front would not affect the Delta, surrounding water bodies, or any USDW because the waste will be injected deep enough to ensure no migration to the Delta or surrounding water bodies occurs.;

## **LAND USE**

NCPA continues to work with the owners of the Kingdon Airport to resolve any potential inconsistencies between the Airport Land Use Plan and the addition of a PG&E gas pipeline adjacent to its existing gas pipeline which crosses the runway protection zone. The San Joaquin Council of Governments is supportive of modification of the plan to remove any inconsistency. NCPA believes Staff and the Committee could resolve any inconsistency with a Condition of Certification.

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## DATA RESPONSES AND WORKSHOPS

NCPA has filed all data responses timely and participated in the Data Response and Issue Resolution Workshop on February 23, 2009. Most recently, NCPA submitted responses to Staff Data Requests Set Number 3 on March 24, 2009. NCPA believes that Staff will have all the information necessary to publish its PSA when the PDOC is released and looks forward to resolving any continuing areas of disagreement at the PSA Workshop.

Dated: April 1, 2009

A handwritten signature in black ink, appearing to read 'R. Gladden', is written over a horizontal line.

Robert Gladden  
Counsel to NCPA

**DECLARATION OF SERVICE**

I, Ashley Y Garner, declare that on April 1, 2009, I served and filed copies of the attached **LODI ENERGY CENTER APRIL STATUS REPORT** dated **April 1, 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](http://www.energy.ca.gov/sitingcases/lodi)]**. 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:

**(Check all that Apply)**

**FOR SERVICE TO ALL OTHER PARTIES:**

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at 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. **08-AFC-10**

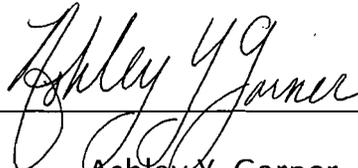
1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

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**[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)**

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

  
\_\_\_\_\_  
Ashley Y. Garner