



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**AMENDED APPLICATION FOR CERTIFICATION
FOR THE HYDROGEN ENERGY
CALIFORNIA PROJECT**

Docket No. 08-AFC-08A

**NOTICE OF INFORMATIONAL HEARING,
U.S. DEPARTMENT OF ENERGY SCOPING MEETING,
AND
PUBLIC SITE VISIT**

On July 31, 2008, Hydrogen Energy International, LLC (Applicant) filed an Application for Certification (AFC) seeking authority to construct and operate the Hydrogen Energy California Project (HECA), an Integrated Gasification Combined Cycle (IGCC) power generating facility rated at a nominal gross generating capacity of 390 megawatts (MW). To avoid conflict with habitat for endangered species in the original location for the project, Applicant retracted the original AFC and filed a revised application on May 28, 2009, for the same project to be built at a different location. An Informational Hearing and Site Visit were conducted on September 16, 2009. The proposed HECA would be located near the unincorporated community of Tupman in western Kern County, California, 7 miles west of the city limit of Bakersfield.

SCS Energy California, LLC acquired 100 percent ownership of HECA, LLC in September, 2011, undertook the re-design of some aspects of the project, and submitted an Amended AFC in May, 2012.

PLEASE TAKE NOTICE that the Committee assigned to this proceeding has scheduled a Public Site Visit and Informational Hearing / U.S. Department of Energy Scoping Meeting as described below:

THURSDAY, JULY 12, 2012

**Public Site Visit begins (bus leaves Elk Hills School) at 5:00 p.m.
Public Informational Hearing begins at 6:00 p.m.**

**Elk Hills School
501 Kern Street
Tupman, CA 93276
(Maps Attached)**

Members of the public are invited to join the Committee on a tour of the proposed site before the Informational Hearing. Complimentary bus transportation from Elk Hills School to the site will be provided, and will depart the school at 5:00 p.m. For site visit and bus reservations, please contact the Commission's Public Adviser's Office, at (916) 654-4489 or 1-800-822-6228 or e-mail: publicadviser@energy.ca.gov. Please make your reservation on or before **July 6, 2012**, so that we can assure you a space.



TELECONFERENCE OPTION: Parties and the Public may attend the Public Informational Hearing and Scoping Meeting in person at the above location or by telephone and/or by computer via our "WebEx" web conferencing system. For details on how to participate by WebEx, please see the "Participation through WebEx" directions attached to this Notice.

Background and Project Description

The proposed project would use Integrated Gasification Combined-Cycle (IGCC) polygeneration technology. It would gasify a 75 percent coal and 25 percent petroleum coke (petcoke) fuel blend to produce synthesis gas (syngas). Syngas produced via gasification would then be purified to hydrogen-rich fuel, which would be used to generate baseload electricity in a Combined Cycle Power Block and produce nitrogen-based products in an integrated Manufacturing Complex. Carbon dioxide (CO₂) emissions would be transported via pipeline for use in enhanced oil recovery (EOR).

Several basic project components remain unchanged, including the following:

- The project site location remains the same.
- The project continues to use IGCC technology.
- Carbon from the syngas is captured during steady state operation.
- CO₂ is transported to the adjacent Elk Hills Oil Field (EHOF) for use in EOR and sequestration.
- Process water consisting of brackish groundwater will be supplied by the Buena Vista Water Supply District (BVWSD).
- Zero Liquid Discharge (ZLD) technology is used in the project design.

The following are some of the project changes proposed in the AFC Amendment:

- The option to purchase an approximately 5-acre parcel adjacent to the project site was acquired subsequent to the 2009 Revised AFC. This parcel became part of the Controlled Area and increased its acreage from 628 to 633.
- Project site boundaries have changed to include some areas previously within the Controlled Area and to exclude other areas that were previously part of the project site.

- The current project site and Controlled Area are now 453 acres and 653 acres, respectively, rather than the sizes of 473 and 628 acres that were presented in the 2009 Revised AFC.
- Mitsubishi Heavy Industries (MHI) oxygen-blown dry feed gasification technology has been selected by the applicant.
- The gasifier preheaters have been eliminated due to the change in design of the gasifier.
- A MHI 501GAC® Combustion Turbine has been selected by the applicant for use in the project.
- Tail gas from the Sulfur Recovery Unit (SRU) will be recycled back to the Gas Treating Area to minimize sulfur dioxide emissions.
- Coal transportation. HECA proposes two alternatives for transferring coal to the project site:
 - **Alternative 1, rail transportation.** An approximately 5-mile new industrial railroad spur that would connect the project site to the existing San Joaquin Valley Railroad (SJVRR) Buttonwillow railroad line, north of the project site. This railroad spur would also be used to transport some HECA products to customers.
 - **Alternative 2, truck transportation.** Truck transport would be via existing roads from an existing coal transloading facility northeast of the project site. The truck route distance is approximately 27 miles. This alternative was presented in the 2009 Revised AFC.
- A new, integrated Manufacturing Complex will produce approximately one million tons per year of nitrogen-based products, including urea, UAN and anhydrous ammonia, to be used in agricultural, transportation and industrial applications.
- The routes of the natural gas pipeline, potable water pipeline, and electrical transmission have been refined as follows:
 - An approximately 13-mile new natural gas pipeline would interconnect with an existing Pacific Gas and Electric Company (PG&E) natural gas pipeline located north of the project site.
 - Potable water would be delivered via an approximately 1-mile pipeline from a new WKWD potable water production site east of the project site.
 - An approximately 2-mile electrical transmission linear would interconnect with a future PG&E switching station east of the project site.

The project's processes would include capturing CO₂ from the syngas and transporting that CO₂ for use in EOR. CO₂ will be transported for use in EOR in the adjacent EHOFF, which is owned and operated by Occidental of Elk Hills, Inc. (OEHI). The OEHI EOR Project will be separately permitted by OEHI through the Department of Conservation,

Division of Oil, Gas, and Geothermal Resources (DOGGR). The EOR process is intended to result in sequestration (storage) of the CO₂.

The project would use approximately 4600 gallons per minute of brackish water on a calendar year average basis for process water needs. This would increase to 5150 gallons per minute during average summer afternoon conditions. The brackish groundwater would be treated onsite to meet project standards. This water would be supplied from Buena Vista Water Storage District (BVWSD), which is a local water district with impaired groundwater sources not suitable for agricultural or drinking use. The proposed BVWSD well field for the project's process water supply is located approximately 15 miles northwest of the project site, necessitating construction of a raw water supply pipeline approximately 15 miles in length. The raw water supply pipeline would connect to five new groundwater wells.

The project would use approximately 1 acre-foot per year of potable water for drinking and sanitary use.

Licensing Jurisdiction

The California Energy Commission has exclusive jurisdiction to license this project and is considering the proposal under a review process established by Public Resources Code section 25540.6. The power plant licensing process, which incorporates requirements equivalent to those of the California Environmental Quality Act (CEQA), considers all relevant engineering and environmental aspects of the proposed project. The licensing review provides a public forum allowing the Applicant, Commission staff, governmental agencies, adjacent landowners, and members of the public to consider the advantages and disadvantages of the project, and to propose changes, mitigation measures, and alternatives as necessary.

DOGGR will separately consider issuing a permit for the OEHI EOR Project. DOGGR has statutory responsibility under Division 3 of the Public Resources Code to regulate all oilfield operations in the State of California. DOGGR is authorized by law to approve the injection and extraction wells and associated well facilities, to regulate downhole operations, and to be responsible for appropriate regulation of surface activities relating to the OEHI CO₂ EOR. The wells to be used for injection of the CO₂ are Class II injection wells under the Underground Injection Control (UIC) program in the Federal Safe Drinking Water Act (SWDA), 42 United States Code § 300h-4. DOGGR has primacy to approve Class II injection wells in the state of California under Section 1425 of the SDWA, see U.S. Environmental Protection Agency (USEPA, 1983). The wells and associated well facilities for the OEHI CO₂ EOR will be approved pursuant to authority provided to DOGGR in the Public Resources Code and the SWDA and in accordance with applicable DOGGR regulations.

The U.S. Department of Energy (DOE) is providing financial assistance to HECA, LLC for the definition, design, construction, and demonstration of the HECA Project. DOE has selected the project through a competitive process under the Clean Coal Power

Initiative Round 3 (CCPI) program. Because the project is receiving funding from a federal agency, it is subject to the National Environmental Policy Act (NEPA). NEPA's process consists of an evaluation of relevant environmental effects of a federal project or action undertaking, including a series of pertinent alternatives. NEPA's process begins when an agency develops a proposal to address a need to take an action.

The engineering and environmental details of the proposed project are contained in the AFC. Copies of the AFC are available at the local public agencies that are involved in the review process and at the following libraries:

Taft Branch
27 Emmons Park Drive
Taft, CA 93268

Tehachapi Branch
1001 West Tehachapi Boulevard, Suite A-400
Tehachapi, CA 93561

Boron Branch
26967 20 Mule Team Road
Boron, CA 93516

Beale Memorial Library
701 Truxtun Avenue
Bakersfield, CA 93301

Buttonwillow Library
116 Buttonwillow Drive
Buttonwillow, CA 93206

Copies are also available at the Energy Commission's Library in Sacramento, the California State Library in Sacramento, and at public libraries in Eureka, San Francisco, Fresno, Los Angeles, and San Diego.

Purpose of the Site Visit and Informational Hearing/Scoping Meeting

The Site Visit and informational Hearing scheduled in this notice provides an opportunity for members of the community in the project vicinity to obtain information, to offer comments, and to view the project site. Anyone may present oral comments at the Informational Hearing and no advance notice need be provided. The Applicant will explain its plans for developing the project and the related facilities and the Energy Commission staff and the U.S Department of Energy representatives will explain the licensing process and their respective roles in the reviewing of the project.

For DOE, this meeting will constitute the public scoping meeting for DOE's NEPA review. The purpose of the scoping process is to establish the alternatives, potential environmental impacts, and other issues DOE should analyze in the EIS. Individuals, businesses, government agencies, and other entities may submit comments to DOE regarding the alternatives, impacts and issues DOE should consider in its EIS. Comments on the scope of the EIS and requests to participate in the public scoping meeting should be addressed to: Mr. Fred Pozzuto, U.S. Department of Energy, National Energy Technology Laboratory, 3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507. Individuals can also submit comments by contacting Mr. Pozzuto by telephone (304-285-5219); toll-free number: (1-866-269-6493); by facsimile (412-386-6127); or by electronic mail: heca.eis@netl.doe.gov.

The public is also invited to present oral comments and suggestions on the scope of the EIS at the July 12, 2012 Scoping Meeting. DOE will accept comments on the scope of the EIS until July 27, 2012; it will consider comments submitted after this date to the extent practicable.

Additional information about DOE's NEPA review of this project can be found at <http://www.netl.doe.gov/publications/others/nepa/index.html>.

Proposed Schedule and Issue Identification Report

Commission staff will file a proposed schedule for project review. Staff will also file an Issues Identification Report summarizing the major issues. This report will also indicate what additional information is necessary to resolve issues of concern. The proposed schedule and Staff's report shall be filed by **noon on July 2, 2012**. The Applicant shall file its response, if any, by **noon on July 6, 2012**.

Copies of these documents will be posted on the Energy Commission's Internet web page at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html.

Public Adviser and Public Participation

The Energy Commission Public Adviser's Office is available to assist the public in participating in the application review process. For information on how to participate, contact the Public Adviser's Office at (916) 654-4489 or 1-800-822-6228 or e-mail: <mailto:publicadviser@energy.ca.gov>.

If you have a disability and need assistance to participate in this event, contact Lourdes Quiroz well in advance of the hearing at 916-654-5146 or e-mail: lou.quiroz@energy.ca.gov.

Information

Questions of a legal or procedural nature should be directed to Raoul Renaud, the Hearing Adviser, at (916) 651-2020, or e-mail: raoul.renaud@energy.ca.gov.

Technical questions concerning the project should be addressed to Robert Worl, Staff Project Manager, at: (916) 651-8853, or e-mail: robert.worl@energy.ca.gov.

Media inquiries should be directed to the Office of Media and Public Communications at (916) 654-4989 or e-mail at: mediaoffice@energy.state.ca.us.

Information concerning the status of the project, as well as notices and other relevant documents, may be viewed on the Energy Commission's Internet web page at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html.

Dated: June 15, 2012, at Sacramento, California.

Original Signed By:

KAREN DOUGLAS
Commissioner and Presiding Member
Hydrogen Energy California AFC Committee

Original Signed By:

ANDREW MCALLISTER
Commissioner and Associate Member
Hydrogen Energy California AFC Committee

Mailed to Lists: POS, 7322, 7323, 7324, 7325.

PARTICIPATION IN THE INFORMATIONAL HEARING AND SCOPING MEETING THROUGH WEBEX
THE ENERGY COMMISSION'S ON-LINE MEETING SERVICE



1. COMPUTER LOG-ON WITH A DIRECT PHONE NUMBER:

- Please go to <https://energy.webex.com>
- Enter the MEETING NUMBER : 923 325 921
- When prompted, enter the MEETING PASSWORD: ahydro#1

After you login, a prompt will appear on-screen for you to provide **your** phone number. In the **Number box**, type your area code and phone number and click "OK." **You will receive a call back on your phone for the audio portion of the meeting.** International callers can use the "Country/Region" button to help make their connection.



2. COMPUTER LOG-ON FOR CALLERS WITH AN EXTENSION PHONE NUMBER, ETC:

- Please go to <https://energy.webex.com> and enter the unique meeting number: and the meeting password (above).
- After you login, a prompt will ask for your phone number. Click "CANCEL."
- Instead call 1-866-469-3239 (toll-free in the U.S. and Canada). When prompted, enter the meeting number above and your unique Attendee ID number which is listed in the top left area of your computer screen after you login.



3. TELEPHONE ONLY (NO COMPUTER ACCESS):

- Call 1-866-469-3239 (toll-free in the U.S. and Canada) and when prompted enter the meeting number unique to the specific hearing date:
- Enter the MEETING NUMBER : 923 325 921

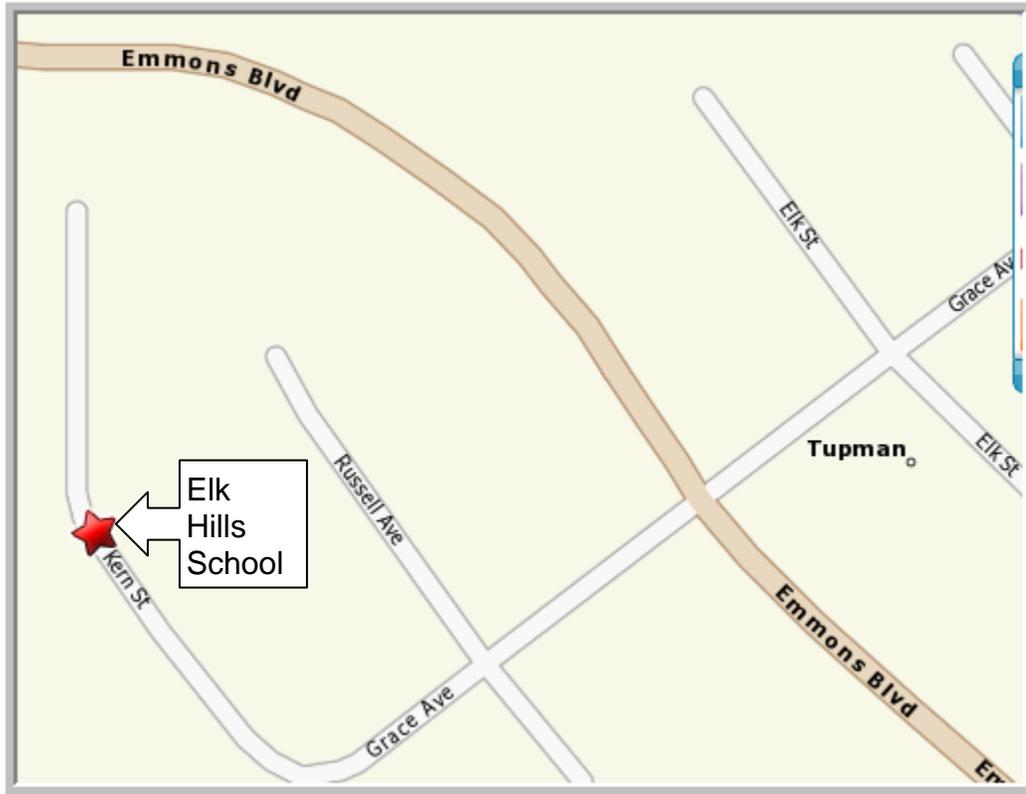
If you have difficulty joining the meeting, please call the WebEx Technical Support number at 1-866-229-3239. To see if your computer is compatible, visit <http://support.webex.com/support/system-requirements.html>].

Please be aware that the meeting's WebEx audio and on-screen activity may be recorded.

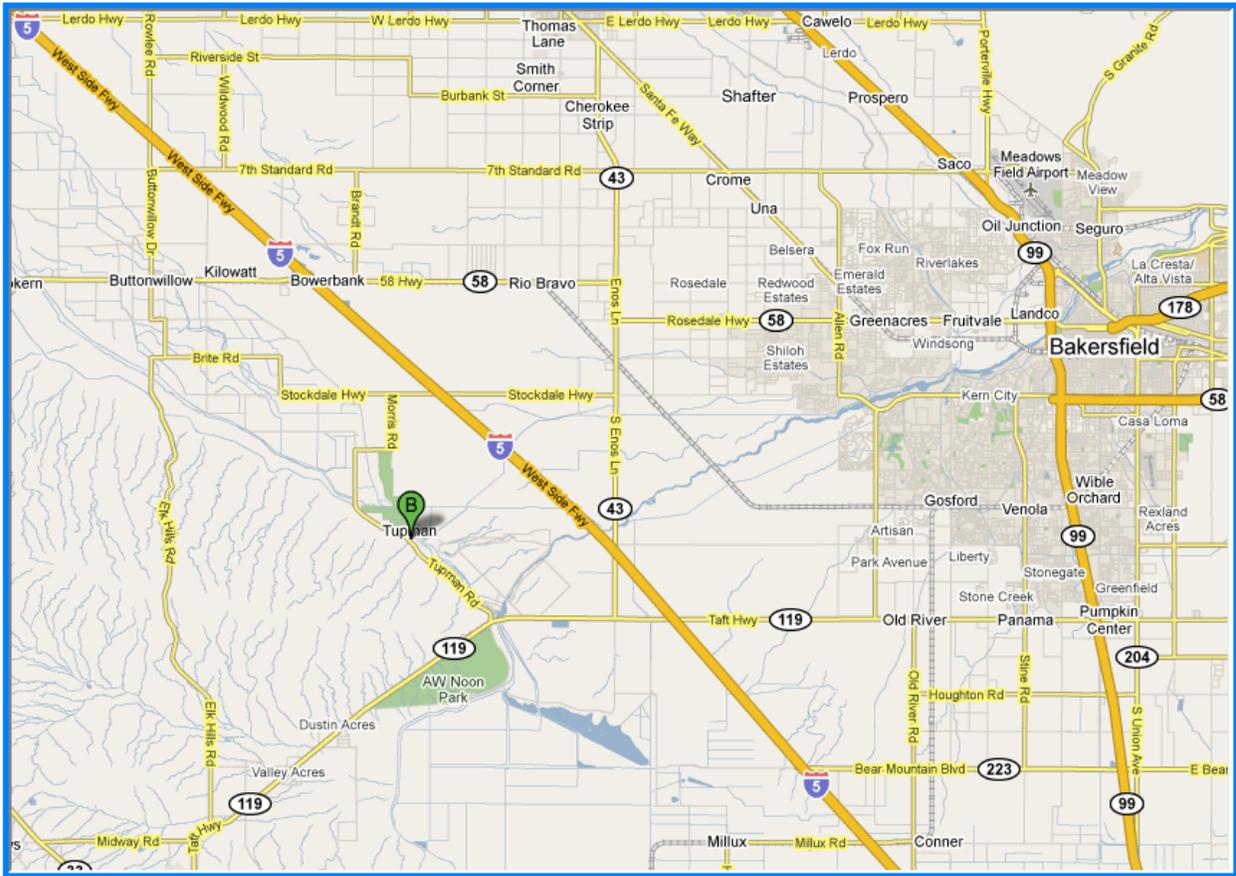
THURSDAY, JULY 12, 2012

**Public Site Visit begins (bus leaves Elk Hills School) at 5:00 p.m.
Public Informational Hearing begins at 6:00 p.m.**

**Elk Hills School
501 Kern Street
Tupman, CA 93276**



HIGHWAYS INTO TUPMAN



From Bakersfield: Take 99 South; Take exit 18 for CA-119 toward Taft/Lamont;
Turn right at CA-119/E Panama Rd/Taft Hwy; Continue to follow CA-119/Taft Hwy 16.2 mi
Turn right at Tupman Rd; Turn left at Grace Ave.
Grace Ave turns slightly right and becomes Kern St; Destination will be on the left

From I-5 Northbound:
Take exit 244 for CA-119/Taft Hwy
Turn left at CA-119/Taft Hwy (signs for Taft)
Turn right at Tupman Rd
Turn left at Grace Ave
Grace Ave turns slightly right and becomes Kern St
Destination will be on the left

From I-5 Southbound:
Take exit 253 for Stockdale Hwy
Turn right at Bellevue Rd/Stockdale Hwy
Turn left at Morris Rd
Turn right at Station Rd
Turn left at Tupman Rd
Turn right at Grace Ave
Grace Ave turns slightly right and becomes Kern St
Destination will be on the left



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**AMENDED APPLICATION FOR CERTIFICATION
FOR THE HYDROGEN ENERGY
CALIFORNIA PROJECT**

**Docket No. 08-AFC-08A
(Est. 6/4/2012)**

APPLICANT

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INTERESTED AGENCIES

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e-recipient@caiso.com

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Department of Conservation
Office of Governmental and
Environmental Relations
(Department of Oil, Gas &
Geothermal Resources)
801 K Street MS 2402
Sacramento, CA 95814-3530
marni.weber@conservation.ca.gov

INTERVENORS

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Adams Broadwell Joseph & Cardozo
520 Capitol Mall, Suite 350
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Tom Frantz
Association of Irrigated Residents
30100 Orange Street
Shafter, CA 93263
tfrantz@bak.rr.com

INTERESTED AGENCIES (con't.)

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Of the Sierra Club
Andrea Issod
Matthew Vespa
85 Second St, Second Floor
San Francisco, California 94105
andrea.issod@sierraclub.org
matt.vespa@sierraclub.org

Environmental Defense Fund (EDF)
Timothy O'Connor, Esq.
1107 Ninth St., Suite 540
Sacramento, CA 95814
toconnor@edf.org

Natural Resources Defense Council
George Peridas
111 Sutter Street, 20th Fl.
San Francisco, CA 94104
gperidas@nrdc.org

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DECLARATION OF SERVICE

I, Jacqueline Clay, declare that on June 15, 2012, I served and filed a copy of the attached NOTICE OF INFORMATIONAL HEARING, U.S. DEPARTMENT OF ENERGY SCOPING MEETING, AND PUBLIC SITE VISIT dated June 15, 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at:

http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:
(Check all that Apply)

For service to all other parties:

- Served electronically to all e-mail addresses on the Proof of Service list;
- Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- by sending one electronic copy to the e-mail address below (preferred method); **OR**
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 08-AFC-08A
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

- Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
michael.levy@energy.ca.gov

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original Signed By: _____

Jacqueline Clay
Hearing Advisers Office