

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512

October 16, 2007

Mr. Gary Carr
SPPE Permitting Manager
Chevron
1450 Marina Way S.
Richmond, CA 94804-3747

DOCKET 07-SPPE-1
DATE <u>OCT 16 2007</u>
RECD. <u>OCT 16 2007</u>

Dear Mr. Carr:

DATA REQUESTS 84 to 94 FOR THE CHEVRON POWER PLANT REPLACEMENT PROJECT (07-SPPE-1)

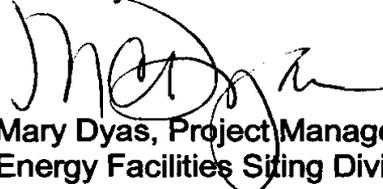
Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff is asking for the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This second set of data requests 84-94 is being made in the technical areas of air quality, biological resources, cultural resources, and socioeconomics. Written responses to the enclosed data requests 84-94 are due to the Energy Commission staff on or before November 16, 2007, or at such later date as may be mutually agreeable.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both Commissioner Jeffrey D. Byron, Presiding Committee Member for the Chevron Power Plant Replacement Project (PPRP), and to me, within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please call me at (916) 651-8891, or email me at mdyas@energy.state.ca.us.

Sincerely,



Mary Dyas, Project Manager
Energy Facilities Siting Division

Enclosure

cc: Dockets 07-SPPE-1
Proof of ServicePROOF OF SERVICE / REVISED 10/16/07, FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 10/16/07

Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS

Technical Area: Air Quality
Author: Brewster Birdsall

BACKGROUND

Emissions from Hydrogen Facility Steam Production

The Project Description (Application Section 2.1) identifies the hydrogen production process as a net producer of steam, and Figure 2.1-18 shows 369,000 pounds per hour of steam used for generating electrical power. However, the Project Description includes no information on whether any emission sources are related to steam production. Staff's impact analysis needs to identify the air quality impacts, if any, of emissions sources related to producing the steam that is provided to the 17 MW steam turbine generator at the hydrogen production facility (H₂-STG).

DATA REQUEST

84. Please identify any emissions caused by steam production for the H₂-STG. For staff to accurately model this impact, the information should include the heating value and chemical characteristics of the fuels used to provide steam to the H₂-STG, the heat rate, emissions, locations, and stack characteristics (e.g., stack height, temperature, velocity, and diameter) of the sources.

BACKGROUND

Cogen 3000 Commissioning, Startups, and Load Following

The ambient air quality impacts analysis does not include commissioning-phase impacts or impacts during routine startups and shutdowns. The applicant's September 10, 2007 response to Data Request 10 indicates that the PPRP is expected to have a very high annual capacity factor, but Section 2.1.16 indicates that the unit may operate in a "load following" mode. Startups are expected to be part of any day that follows a maintenance period, and because of the excessive emissions during startups, they must be included in the estimates of maximum daily and annual emissions.

The applicant's September 10, 2007 response to Data Request 8 shows that each startup requires two hours, and that the first hour of startup would generate 238 pounds of nitrogen oxides (NO_x) emissions, a level exceeding the 143 lb/hr rate shown in Application Table 8.1-15. Table 8.1-15 is misleading because it shows the average emissions of the two hour startup rather than the maximum emissions. Similarly, Table 8.1-19 does not show overall maximum emissions because startups are excluded.

Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS

Because Response to Data Request 11 does not account for the hourly impacts of startups (especially for the state 1-hour NO₂ standard) that must be taken into account, that request is reiterated here.

DATA REQUEST

85. Please review the hourly, daily, and annual emission rates shown in Application Table 8.1-19 and revise as needed to include startups and shutdowns.
86. Please provide an air dispersion modeling analysis of Cogen 3000 including startups in order to demonstrate compliance with ambient air quality standards (especially the 1-hour standards for NO₂ and CO).
87. Please provide an air dispersion modeling analysis of Cogen 3000 including commissioning-phase emissions in order to demonstrate compliance with ambient air quality standards.

BACKGROUND

Cumulative Impacts

In the applicant's September 10, 2007 response to Data Request 16, Chevron asserts that a duplicative cumulative analysis should not be needed by Energy Commission staff. Chevron offered to provide the cumulative analysis of the City of Richmond Final Environmental Impact Report (EIR), when it becomes available. The Draft EIR analysis of cumulative impacts is based on an evaluation of the consistency of the Renewal Project with regional air quality plans. In order to show that the PPRP would not cause new localized violations of ambient air quality standards or contribute substantially to existing violations of those standards, Energy Commission staff aims to provide a quantitative analysis of PPRP and cumulative ambient air quality impacts. The initial step in staff's analysis would be to determine whether standards would be violated by the new sources, absent any shutdowns or contemporaneous reductions. This is especially important for pollutants that do not currently exceed the standards (such as NO₂ and CO) where PPRP sources (including startups and commissioning) and cumulative sources could create new localized violations. For example, compliance with regional plans for ozone attainment, which require Chevron to offset ozone precursors, does not guarantee that localized cumulative concentrations of NO₂ will remain below the ambient air quality standards. Because Response to Data Request 16 does not include sufficient information to conduct a refined dispersion modeling analysis of cumulative sources, that request is reiterated here. Cumulative sources are projects that are in permitting or under construction within six miles of the PPRP.

Because the applicant's September 10, 2007 response to Data Request 17 does not include complete information for staff to conduct a refined dispersion modeling analysis of existing electrical generation sources, additional information is requested here.

Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS

DATA REQUEST

88.
 - a. Please contact the BAAQMD and request a list of cumulative stationary sources with emissions greater than 10 pounds per day and verify that all "reasonably foreseeable" sources within six miles have been identified. The information must include stack locations, emissions, and parameters (e.g., height, temperature, velocity, and diameter) suitable for use in a refined dispersion model.
 - b. Please prepare an ambient air quality impact assessment of the cumulative sources including those related to the Renewal Project and other emission sources associated with "reasonably foreseeable projects" within six miles of the proposed project.
89. For staff to model the existing Cogen 1000 and 2000 units, please provide:
 - a. Please identify the existing (annual, daily, and hourly) emissions for Cogen 1000 and 2000 separately.
 - b. Please identify the stack location(s) for Cogen 1000 and 2000 separately in terms of the coordinates used in the dispersion modeling analysis for the PPRP (i.e., Cartesian coordinates of Universal Transverse Mercator (UTM), 1927 North American Datum).

Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS

Technical Area: Biological Resources

Author: Heather Blair

BACKGROUND

The application for SPPE refers to the results of the “relatively intensive bird surveys in the treatment marsh areas between 1994 and 2004” (page 8.2-13). This report was not cited in the application’s references but was cited in the Chevron Energy and Hydrogen Renewal Project Draft EIR as “*Chevron Richmond Refinery Water Enhancement Wetland Studies 1994 - 2004*. November 2004.” Staff needs this information to describe the proposed project’s biological setting and complete the analysis of potential impacts.

DATA REQUEST

90. Please provide the November 2004 report referenced above.

BACKGROUND

The application refers to a “two-year study of the RRWEW between 1994 and 1995 by Chevron” and “follow up studies in 2000 and 2004” that were conducted to identify management actions and assess their effectiveness in limiting bird exposure to selenium in the treatment wetlands (pp 2-17 and 2-18). Although this report was not cited in the application’s references, the applicant is likely referring, in part, to *Selenium bioaccumulation study at Chevron’s Richmond refinery water enhancement wetland*. Oakland, CA: CH2M Hill, 1995. Staff needs this information to understand the past environmental issues and current management practices of the treatment wetlands in order to assess potential impacts to biological resources.

DATA REQUEST

91. Please provide the 1995 CH2M Hill report and/or other reports containing the information referenced above.

**Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS**

Technical Area: Cultural Resources

Author: Beverly E. Bastian

BACKGROUND

Cultural resources studies pertinent to the refinery are included in the cultural resources "References" sections of the SPPE application and the Chevron Renewal Project's Draft Environmental Impact Report (DEIR). Staff needs to review these studies to supplement sparse discussion and to clarify conflicting data in the cultural resources sections of the SPPE application and the DEIR. Please file the following reports under confidential cover.

DATA REQUESTS

92. Please provide the following reports cited in the SPPE application:
 - a. Martorana, D., 2006, "Cultural Resource Technical Memorandum for the Chevron Energy and Hydrogen Renewal Project ADEIR."
 - b. Banks, P., and R. Orlins, 1981, "Investigations of Cultural Resources Within the Richmond Harbor Redevelopment Project 11-A, Richmond, California."
93. Please provide the following report cited in the DEIR:
 - a. Hupman, J. M., and D. Chavez, 1993, "Archaeological Resources Investigations for the Chevron Reformulated Fuels Project EIR, Richmond, California."

**Chevron Richmond Power Plant Replacement Project
07-SPPE-1
DATA REQUESTS**

Technical Area: Socioeconomics

Author: Hedy Born

BACKGROUND

Quantitative secondary economic impacts (with and without dollars) add useful and necessary additional information at the local (county)/regional/state level about the economic benefits/economic development from the PPRP.

DATA REQUEST

94. a. Please provide full quantitative economic impacts (direct and secondary-indirect and induced) during the construction and operation phases of the project. Utilize an economic impact model (e.g., IMPLAN, REMI) that will estimate quantitatively at least the local (Contra Costa County) employment and income multipliers/secondary impacts. Staff recommends Type II or Type III employment and income multipliers since they show the full secondary economic impacts.
- b. Please provide the year for the economic impact analysis estimates.

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

**CHEVRON RICHMOND POWER
PLANT REPLACEMENT PROJECT
SMALL POWER PLANT EXEMPTION**

Docket No. 07-SPPE-1

**PROOF OF SERVICE
(Revised 10/11/07)**

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-SPPE-1
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

APPLICANT

Gary Carr
Chevron SPPE Permitting Manager
1450 Marina Way S.
Richmond, CA 94804-3747
gcch@chevron.com

Bob Chamberlin, Mgr.
Chevron Renewal Project Permitting
Richmond Refinery
841 Chevron Way
Tech Center, Room 329
P.O. Box 1272
Richmond, CA 94802
rtch@chevron.com

Paul Millner
Manager, Business Development
Chevron
Richmond Refinery
841 Chevron Way
Admin, Room 314
Richmond, CA 94802
PAMR@chevron.com

APPLICANT CONSULTANT

David A. Stein, PE
Vice President
CH2M HILL
155 Grand Avenue, Suite 1000
Oakland, CA 94612
dstein@ch2m.com

Jerry Salamy
Senior Project Manager
CH2M HILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833
jsalamy@ch2m.com

COUNSEL FOR APPLICANT

Evelyn Kahl
Alcantar & Kahl, LLP
120 Montgomery St, Ste 2200
San Francisco Ca 94104
ek@a-klaw.com

INTERESTED AGENCIES

Larry Tobias
Ca. Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
LTobias@caiso.com

Electricity Oversight Board
770 L Street, Suite 1250
Sacramento, CA 95814
esaltmarsh@eob.ca.gov

INTERVENORS

Marc D. Joseph
Suma Peesapati
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
mdjoseph@adamsbroadwell.com
speesapati@adamsbroadwell.com

* **Communities for a Better Environment**
Adrienne Bloch
Philip Huang
1440 Broadway, Suite 701
Oakland, CA 94612
abloch@cbecal.org
phuang@cbecal.org

ENERGY COMMISSION

JEFFREY D. BYRON
Commissioner and Presiding Member
ibyron@energy.state.ca.us

ARTHUR H. ROSENFELD
Commissioner and Associate Member
arosenfe@energy.state.ca.us

Raoul Renaud
Hearing Officer
rrenaud@energy.state.ca.us

Mary Dyas
Project Manager
mdyas@energy.state.ca.us

Lisa DeCarlo
Staff Counsel
ldecarlo@energy.state.ca.us

Public Adviser's Office
pao@energy.state.ca.us

DECLARATION OF SERVICE

I, Maria Sergoyan, declare that on October 16, 2007, I deposited copies of the attached Data Requests 84 to 94 for The Chevron Power Plant Replacement Project (07-SPPE-1), in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

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


Maria Sergoyan