#### Memorandum

Date:

October 26, 2007

Telephone: (916) 653-1639

File:

07-AFC-4

To:

Chairman Jackalyne Pfannenstiel, Presiding Member

Vice-Chair Commissioner James Boyd, Associate Member

From:

California Energy Commission ~

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Siting Project Manager



DOCKET
07-AFC-4

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Subject:

CHULA VISTA ENERGY UPGRADE PROJECT (07-AFC-4)

**ISSUES IDENTIFICATION REPORT** 

Attached is staff's Issues Identification Report for the Chula Vista Energy Upgrade Project (07-AFC-4). This report serves as a preliminary scoping document that identifies the issues that Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present the issues report at the Informational Hearing and Site Visit to be held on November 29, 2007.

CC:

Docket (07-AFC-4)

**Proof of Service List** 

Attachment

### **CHULA VISTA ENERGY UPGRADE PROJECT**

(07-AFC-4)

October 26, 2007

## **ISSUES IDENTIFICATION REPORT**

CALIFORNIA ENERGY COMMISSION

Energy Facilities Siting Division

# ISSUES IDENTIFICATION REPORT CHULA VISTA ENERGY UPGRADE PROJECT

(07-AFC-4)

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#### **ISSUES IDENTIFICATION REPORT**

California Energy Commission Staff

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our discussions with federal, state, and local agencies, and our review of the Chula Vista Energy Upgrade Project Application for Certification (AFC), Docket Number 07-AFC-4. The Issues Identification Report contains a project description, summary of potentially significant environmental and engineering issues, and a discussion of the proposed project schedule. The staff will address the status of issues and progress towards their resolution in periodic status reports to the Committee.

#### PROJECT DESCRIPTION

The proposed Chula Vista Energy Upgrade Project (CVEUP) would be a nominal 100-megawatt (MW) peaking facility, with construction planned to begin in the fall of 2008 and commercial operation planned by the fall of 2009. Primary equipment for the generating facility would include two General Electric (GE) LM6000 natural gas-fired turbine-generators and associated equipment. The project site is located on a 3.8-acre parcel in the city of Chula Vista's Main Street Industrial Corridor and within the City's Light Industrial zoning district. The project site address is 3497 Main Street, Chula Vista, California, 91911. Access to the site is via an easement that runs south from Main Street within an adjacent property. This easement also provides access to employee parking for newly constructed industrial buildings immediately east of the project site.

The CVEUP site is currently occupied by MMC's Chula Vista Power Plant, a 44.5-MW simple-cycle, natural gas-fired peaking power plant using Pratt & Whitney FT4 Twinpac™ technology. The CVEUP would replace the existing older and less efficient technology with newer, more efficient equipment with lower emissions. As part of the CVEUP, the existing power plant and pollution control equipment would be removed from the southern portion of the project parcel. The proposed plant, using GE LM6000 technology, would be constructed on vacant land in the northern portion of the parcel. Some of the facilities that serve the existing plant would be reused for the new power plant. These facilities include the existing transmission connection; natural gas, water, and sanitary sewer pipelines; fencing and sound attenuation wall; utility/control building; stormwater runoff retention basin; and the 12,000-gallon aqueous ammonia storage tank and tank refilling station. Once the new plant is constructed, the existing plant would be dismantled and removed. The existing power equipment would be sold for salvage and the foundations, piping, and other equipment associated with the existing plant will be removed.

Because the proposed CVEUP would reuse the existing electrical transmission, natural gas, water service, and sanitary sewer pipelines, the proposed project would have no new offsite linear facilities. The existing plant connects to San Diego Gas and Electric's (SDG&E's) electrical transmission system at the Otay Substation, which is approximately 1,020 feet north of the project site. This connection consists of a 69-kilovolt (kV) single-

circuit transmission system mounted on wooden poles that runs north from the project parcel along its western boundary.

The existing plant connects with the Sweetwater Authority's water supply system through a 4-inch-diameter onsite pipe. Project water uses would include turbine washes and process makeup, site landscape irrigation, and domestic and sanitary uses. The existing pipeline extends south from Main Street within an existing utility easement that runs in the access lane and connects the parcel with Main Street immediately to the east. The applicant has stated that reclaimed water is not currently available in or near this location.

The CVEUP would also use the existing project's 8-inch-diameter sanitary wastewater pipeline that currently serves the project site located within a sanitary sewer easement that runs along the western boundary of the property.

#### POTENTIAL MAJOR ISSUES

This portion of the report contains a discussion of the potential issues the Energy Commission staff has identified to date. The Committee should be aware that this report might not include all of the significant issues that may arise during the case. Discovery is not yet complete, and other parties have not had an opportunity to identify their concerns. The identification of the potential issues contained in this report is based on comments of other government agencies and on our judgment of whether any of the following circumstances will occur:

- Potential significant impacts which may be difficult to mitigate;
- 2. Potential areas of noncompliance with applicable laws, ordinances, regulations or standards (LORS);
- 3. Areas of conflict or potential conflict between the parties; or
- 4. Areas where resolution may be difficult or may affect the schedule.

The following table lists all the subject areas evaluated and notes the Air Quality, Land Use, Soil and Water Resources, and Transmission System Engineering areas where potentially significant issues have been identified. Even though an area is identified as having no potential issues, it does not mean that an issue will not arise related to the subject area.

	DRs	Subject Area	Major Issue	DRs	Subject Area
			No	No	Noise and Vibration
No	No	Biological Resources	No	No	Paleontological Resources
No	No	Cultural Resources	No	No	Public Health
No	No	Efficiency and Reliability	No	No	Socioeconomics
No	No	Electromagnetic Fields & Health Effects			
No	No	Facility Design	No	No	Traffic and Transportation
No	No	Geological Resources	No	No	Transmission Line Safety
No	No	Hazardous Materials		ta 11 million	
No	No	Worker Safety and Fire Protection	No	No	Visual Resources
3			No	No	Waste Management
No	No	Project Overview	No	No	Alternatives

This report does not limit the scope of staff's analysis throughout this proceeding, but it acts to aid in the analysis of the potentially significant issues that the CVEUP proposal poses. The following discussion summarizes the potential issues, identifies the parties needed to resolve the issues, and where applicable, suggests a process for achieving resolution. At this time, staff does not see these potential issues as non-resolvable.

#### **AIR QUALITY**

Staff reviewed the application for the CVEUP and found a potential air quality issue that could delay the Commission review process. It is not clear that the CVEUP nonattainment pollutants and their precursors will be sufficiently mitigated (i.e., at a minimum 1:1 basis) as a result of the applicant's proposed mitigation. The applicant's offset mitigation proposal includes taking credit for the existing gas turbines' potential to emit. Although the existing Chula Vista Power Plant 44.5 MW simple-cycle gas turbines will be removed as part of the proposed project, staff believes that the project's mitigation should be based on actual emission reductions, as is required for New Source Review offset banking, not potential to emit at a higher capacity factor than that at which the Chula Vista Power Plant has been operating.

The San Diego Air Pollution Control District (SDAPCD) permitting requirements for this project do not require emission offsets; however, it is staff's long-standing mitigation position, that all nonattainment pollutants and their precursors need to be mitigated at a minimum ratio of 1:1. The San Diego Air Basin in the area of the project site is classified as nonattainment for the state ozone, PM10 and PM2.5 standards and federal ozone standard. Without proper offset mitigation this project could contribute to existing violations of the state and federal ambient air quality standards. Without appropriate and adequate mitigation measures, staff would have concerns about the impacts of the project. Staff is addressing the issue through data requests to the applicant.

#### LAND USE

The proposed CVEUP site has a City of Chula Vista General Plan designation of "Limited Industrial," which is intended for the following land use types: light manufacturing; warehousing; auto repair; auto salvage yards; and flexible use projects that combine these uses with associated office space uses. The proposed site is zoned as I-L (Limited Industrial) with allowable uses including manufacturing, wholesale businesses, storage and warehousing, laboratories, electrical substations and gas regulator stations, car washing establishments, and other manufacturing uses determined by the city of Chula Vista to be of the same general character. The City of Chula Vista General Plan designation for the two proposed laydown areas is "Open Space Preserve," which is intended for areas designated within the Chula Vista Multiple Species Conservation Program (MSCP). The zoning designations for the two alternative laydown areas are A-70 (Agricultural/County) for the laydown area located to the southeast of the CVEUP site, and RS-114 (Single-Family Residential) for the laydown area located 3 miles to the east of the CVEUP site.

Based on the allowable uses of the proposed CVEUP site and laydown areas, a heavy industrial use such as a power plant (and associated activities) is not specifically listed as a permitted use or conditional use within the city of Chula Vista. It is likely that because the proposed project is not listed as a permitted use within the zones in which it occurs, it may be subject to conditions required by the city. The California Energy Commission will address the issues typically reviewed by the city of Chula Vista in granting a Conditional Use Permit (CUP), and consider any specific conditions the city believes should be placed upon the project.

Staff is currently coordinating with the city of Chula Vista to discuss issues of concern to the city with regard to any land use and zoning designation inconsistencies of the proposed CVEUP site and laydown areas. Based on discussions with the city of Chula Vista building and planning department staff, the CVEUP may be subject to a Precise Plan or a "Modifier" to the site's zoning designation to allow for the new facility at the proposed site. If this action is required to make the proposed project comply LORS, it could delay the project's schedule.

City staff also believes the following plans and/or guidelines need to be addressed in the land use section of the Staff Assessment:

- The CVEUP site is adjacent to the city's greenbelt and the proposed project would have to be reviewed to determine its consistency with the Greenbelt Master Plan.
- The CVEUP site is near the Otay Valley Regional Park, and therefore the Otay Valley Regional Park Concept Plan and Design Guidelines is relevant.

Staff is working with the city of Chula Vista on data requests regarding the project's consistency with the Greenbelt Master Plan, Otay Valley Regional Park Concept Plan, and Design Guidelines.

#### **SOIL AND WATER RESOURCES**

The CVEUP proposes to use potable (city water) water from the Sweetwater Authority for all uses at the proposed power plant. This proposal runs counter to state water policy.

The examination of alternative water supplies and technologies is triggered under the state's water policy when a power plant proposes to use "fresh water" (IEPR Water Policy 2003). The IEPR itself does not define what constitutes fresh water. State Water Resources Control Board (SWRCB) Resolution 75-58, upon which the IEPR water policy is based, defines fresh inland waters as "those inland waters which are suitable for use as a source of domestic, municipal, or agricultural water supply..." (SWRCB Resolution 75-58, p. 3.) The potable water from Sweetwater Authority proposed for use at CVEUP meets the definition of fresh inland water under SWRCB's Resolution 75-58 because it is used for domestic use in the area.

LORS and water policies applicable to this project stem from, among other things, Article X, Section 2 of the California Constitution, which declares that "the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented..." In order to better define what "unreasonable use" means in terms of power plant cooling, the State Water Resources Control Board (SWRCB) issued Resolution 75-58, "Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Power plant Cooling" ("Resolution 75-58"). It sets forth, in priority order, a list of preferable water sources for power plant cooling. This list, in priority order, is as follows: (1) wastewater being discharged to the ocean, (2) ocean, (3) brackish water from natural sources or irrigation return flow, (4) inland wastewaters of low TDS, and (5) other inland waters. Since adopting Policy 75-58 in 1976, the SWRCB has more recently confirmed the ongoing applicability of its policy for cooling of modern power plants and clarified a basic principle by stating, "The policy requires that the lowest quality cooling water reasonably available from both a technical and economic standpoint should be utilized as the source water for any evaporative cooling process utilized at these facilities" (SWRCB 2002a).

Based, in part, on the State Constitution and SWRCB Policy 75-58, the Energy Commission's Integrated Energy Policy Report, 2003 ("IEPR") specifies that "the Energy Commission will approve the use of fresh water for cooling purposes by power plants which it licenses only where alternative water supply sources and alternative cooling technologies are shown to be 'environmentally undesirable' or 'economically unsound."

The CVEUP application simply states that no reclaimed water is available nearby. This may be the case but it needs to be proven by records of conversations and contact information for agencies and individuals. The quantity of water at issue is not large (85 acre-feet) but its use is inconsistent with state policy. Staff intends to pursue this issue more fully through data requests.

#### TRANSMISSION SYSTEM ENGINEERING

The California Environmental Quality Act (CEQA) requires the identification and description of the "Direct and indirect significant effects of the project on the environment." The Application for Certification requires discussion of the "energy resource impacts which may result from the construction or operation of the power plant." For the identification of impacts on the transmission system resources and the indirect or downstream transmission impacts, staff relies on the System Impact Study (SIS).

The SIS identified that reconductoring of two 69 kV transmission lines will be required to mitigated overloads caused by the addition of the CVEUP. However, the SIS has not identified the specific line sections. Staff has prepared Data Requests asking for clarification of the SIS. Staff will also request the Facility Study. As of this time, the reconductoring of these lines is a downstream, indirect project impact that will require a general CEQA analysis.

#### SCHEDULING

Following is staff's proposed 12-month schedule for key events of the project. Meeting the proposed schedule will depend on: the applicant's timely response to staff's data requests; the timing of the SDAPCD's filing of the Determination of Compliance; determinations by other local, state and federal agencies; and other factors not yet known. The SDAPCD will be required to provide a Preliminary Determination of Compliance (PDOC) and a Final Determination of Compliance (FDOC). Prior to the publication of the Preliminary Staff Assessment (PSA) staff normally requires a PDOC from the air district, and the FDOC before it publishes the Final Staff Assessment.

# STAFF'S PROPOSED SCHEDULE – CHULA VISTA ENERGY UPGRADE PROJECT (07-AFC-4)

ACTIVITY	<u>DATE</u>
Applicant files Application for Certification (AFC)	8/10/07
Executive Director's recommendation on data adequacy	9/10/07
Commission's determination on data adequacy	9/26/07
Staff files Issue Identification Report	10/26/07
Staff files data requests	est. 11/01/07
Informational Hearing and Site Visit	11/29/07
Applicant provides data responses	12/03/07
Data response and issue resolution workshop	12/10/07
Staff and applicant each file Status Report 1	12/07/07
Local, state and federal agency draft determinations & SDAPCD PDOC	1/10/08
Staff and applicant each file Status Report 2	2/07/08
Staff files Preliminary Staff Assessment (PSA)	2/13/08
PSA workshop	2/27/08
Local, state and federal agency final determinations & SDAPCD FDOC	2/13/08
Staff and applicant each file Status Report 3	4/07/08
Staff files Final Staff Assessment (FSA)	4/13/08
Prehearing Conference*	TBD
Evidentiary hearings*	TBD
Committee files proposed decision*	TBD
Hearing on the proposed decision*	TBD
Committee files revised proposed decision*	TBD
Commission Decision * The assigned Committee will determine this part of the schedule.	est. 9/17/08

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

Application for Certification For the CHULA VISTA ENERGY UPGRADE PROJECT Docket No. 07-AFC-4

PROOF OF SERVICE (Est. 10/1/07)

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-14 Sacramento, CA 95814-5512 docket@energy.state.ca.us

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#### **DECLARATION OF SERVICE**

I, <u>Dora Gomez</u>, declare that on <u>October 29, 2007</u>, I deposited copies of the attached, <u>Chula Vista Energy Upgrade Project (07-AFC-4) Issues Identification Report</u> in the United States mail at <u>Sacramento</u>, <u>California</u> with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

<u>OR</u>

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.

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