

ORIGINAL

CH2M HILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833



CH2MHILL

July 19, 2005
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DOCKET 04-AFC-1
DATE JUL 19 2005
RECD. JUL 19 2005

Mr. William Pfanner
Siting Project Manager
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814-5504

RE: Data Response, Set 3C
San Francisco Electric Reliability Project (04-AFC-1)

Dear Bill:

On behalf of the City of San Francisco, please find attached 12 copies and one original of Data Response, Set 3C, in response to Staff's Data Requests dated May 2, 2005. Copies of the data responses are being filed both electronically and in hard copy.

Please call me if you have any questions.

Sincerely,

CH2M HILL

A handwritten signature in black ink, appearing to read "John L. Carrier".

John L. Carrier, J.D.
Program Manager

c: Project File
Proof of Service List

**SAN FRANCISCO ELECTRIC
RELIABILITY PROJECT
(04-AFC-1)**

DATA RESPONSE, SET 3C
(Responses to Data Requests: 161, 163, 173, 175, 177, 183, and 187)

Submitted by
CITY AND COUNTY OF SAN FRANCISCO

July 19, 2005



2485 Natomas Park Drive, Suite 600
Sacramento, California 95833-2937

**San Francisco Electric Reliability Project (SFERP)
(04-AFC-1)
Supplement A Data Response, Set 3C**

Technical Area: Cultural Resources

CEC Authors: Beverly E. Bastian and Gary Reinoehl

SFERP Author: Doug Davy

BACKGROUND

Section 8.3.3.6.1 of Supplement A summarizes the results of an archaeological field survey of the new project plant site, transmission alignment, natural gas pipeline route, and water supply pipelines (process and potable) conducted on February 21, 2005. No individual report of this survey has been provided with this application.

DATA REQUEST

161. Please provide a technical report in Archaeological Resource Management Reports (ARMR) format documenting the February 21, 2005 archaeological survey (methodology, transect intervals, ground visibility, etc.) prepared by an individual that meets the U.S. Secretary of the Interior's Professional Standards. Please append a copy of the record search (NWIC 04-687) to the technical report. If the ARMAR identifies any site locations the report should be submitted under confidential cover.

Response: After submitting the Archaeological Resources Management Report (Attachment CR-161), the CEC staff provided some minor comments and requested that the report also include a survey of the construction laydown area. The revised report, including the survey of the construction laydown area, will be provided by August 30, 2005.

BACKGROUND

Section 8.3.3.6.7 of Supplement A contains a discussion of the efforts made by the previous applicant, SECAL/Mirant, and the cultural resources firm, CH2M HILL, to initiate Native American consultation on an earlier power plant project, located two blocks north of the present project proposed by the City and County of San Francisco (CCSF). From this discussion, it is clear that the CCSF has not consulted with Native Americans about possible impacts to resources of concern to them in the new location of the proposed power plant.

In December, 2003, the Native American Heritage Commission (NAHC) provided CCSF with a list of Native American contacts with historic ties to the project area. In that letter, the NAHC advised: "If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received." Native American contact efforts by CCSF for the previous proposed plant site are outlined in Supplement A, Section 8.3.3.6.7. The discussion provides no indication that the officially requested follow-up telephone contacts were carried out.

**San Francisco Electric Reliability Project (SFERP)
(04-AFC-1)
Supplement A Data Response, Set 3C**

DATA REQUEST

163. If responses from Native Americans are not received in the time allowed, please make follow-up telephone calls and provide Energy Commission staff with copies of either letters from the NAHC responding to your request(s) or telephone logs of the calls, evidencing that the notification was made and documenting any other information provided by Native Americans.

Response: Project staff made follow-up calls to all persons listed on the Native American Heritage Commission consultation list for the project and left messages indicating a number to call for further information on July 11, 2005. This was followed up with a second message on July 13, 2005. There are six persons named on the list, one of whom does not list a telephone number. No responses have been received as of July 18, 2005.

BACKGROUND

The Supplement A states that a geotechnical boring study of the proposed site will be done (p. 10G-4). Such a study could provide information on submerged cultural resources located on the former Bay floor.

DATA REQUEST

173. If geotechnical boring has not yet been completed, please have an archaeologist, who meets the Secretary of the Interior's Professional Standards, monitor the boring and write a report, consistent with ARMR format, on any cultural materials present in the cores, descriptions of sediments, and an assessment of the potential of the project to disturb buried cultural resources. Please provide staff with a copy of that report within 30 days of completion of the boring. If it is not possible to meet that schedule, please provide staff with a projected date for submitting the report.

Response: Geotechnical borings will begin on July 20, 2005 and are estimated to be completed by August 5, 2005. A report from the archeologist who monitored the borings will be provided by August 31, 2005.

BACKGROUND

The Supplement A postpones a decision on the necessary depth of the foundations of the components of the power plant site, but describes the fill on which the plant will be built as quite variable in depth (up to 40 feet), and of a character probably requiring the use of pilings or caissons (p. 10G-4-5). Pilings or caissons could potentially impact any cultural resources buried under the fill at the proposed plant site, such as sunken vessels, lost cargoes, collapsed wharves, and buried or submerged archaeological sites. The application makes no mention of the potential for submerged historic-period resources under the fill at the plant site. More information is needed for staff to assess the potential for submerged or buried archaeological resources.

**San Francisco Electric Reliability Project (SFERP)
(04-AFC-1)
Supplement A Data Response, Set 3C**

DATA REQUEST

175. If the project site was underwater prior to the filling, please consult Pam Griggs (916-574-1854) with the State Lands Commission and with the San Francisco Maritime Museum to determine if there are known shipwrecks in the project site and provide a copy of maps or other information obtained by this search.

Response: Pam Griggs of the State Lands Commission contacted project staff to report the results of her search of the State Lands Commission's shipwrecks database.

According to Ms. Griggs e-mail response, dated June 8, 2005:

The search resulted in only one identified shipwreck, the "Fannie Adele," but it is probably not located within your project footprint. Our database contains the following information:

Fannie Adele, three-masted schooner, built 1883, sunk 5/24/1904, cause: explosion, tonnage: 234, 16th Street Pier, after explosion, her hawsers were cut and she was allowed to drift towards the Golden Gate. She burned to the water's edge and was a total loss.

We do not have any additional information on this vessel. Since the 16th Street Pier is significantly north of your project area, and the vessel drifted toward the Golden Gate, it is unlikely that she is within your project area.

177. If the archeological assessment of the geotechnical boring at the plant site and/or the requested assessment of the potential for submerged or buried cultural resources indicate the possible presence of such cultural resources, please provide a discussion of what impact the proposed pilings or caissons will have on those resources.

Response: If cultural materials are discovered, this issue will be discussed in the report prepared in response to Data Request #173.

San Francisco Electric Reliability Project (SFERP)
(04-AFC-1)
Supplement A Data Response, Set 3C

Technical Area: Transmission System Engineering
CEC Author: Mark Hesters
SFERP Author: Steven Brock

BACKGROUND

Staff needs to completely identify facilities required for termination of the project and all "downstream" transmission facilities required by interconnection of the project. The System Impact Study provided in the AFC studied the project with a 900-foot interconnection to the Potrero substation. The AFC Supplement A describes two possible 3000-foot underground cables to the Potrero substation. Staff needs an approved facility study for the new interconnection.

DATA REQUEST

183. Provide the Cal-ISO Final Interconnection Approval letter for the new interconnection to the Potrero substation.

Response: The Cal-ISO Final Interconnection Approval letter has been provided as Attachment TSE-183A.



June 27, 2004

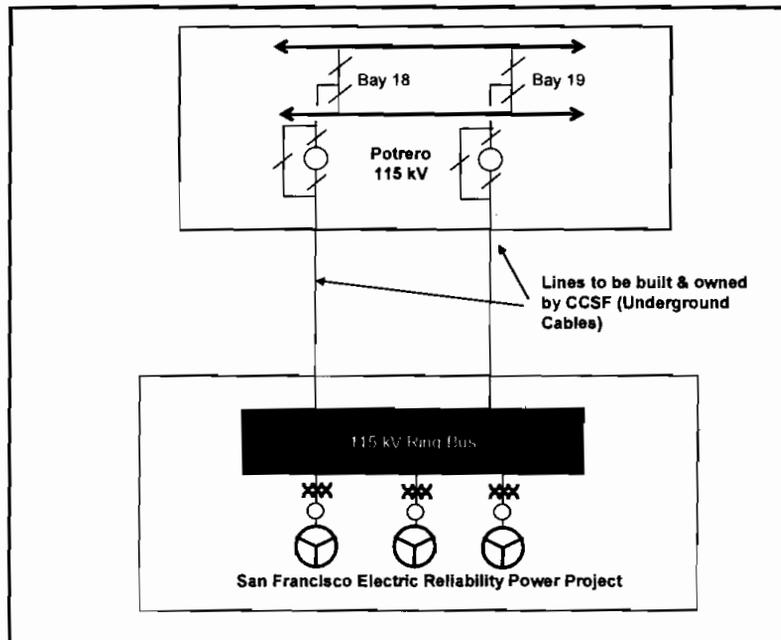
Mr. John Vardanian
Generator Interconnection Services
Pacific Gas and Electric Company
Mail Code: N7L, Room 775
245 Market Street
San Francisco, CA 94105

**Subject: San Francisco Electric Reliability Power Project
Final Interconnection Approval**

Dear Mr. Vardanian:

The California ISO (Cal-ISO) has reviewed the Feasibility/Updating Facility Study II (F/UFS) report for the San Francisco Electric Reliability Power Project (SFERPP) conducted by Pacific Gas and Electric Company (PG&E) at the request of the City and County of San Francisco (CCSF) dated June 8, 2005. The Cal-ISO had previously reviewed an Updating Facility Study Report and granted final interconnection approval in a letter dated May 28, 2004 for the original site. The project was originally proposed to be sited within Mirant's Potrero Power Plant property, but will now be sited about 0.3 miles south near Illinois and 25th streets in San Francisco. Therefore, an updated F/UFS was conducted to more accurately reflect the costs and work scope required to connect the three CTG configuration for the SFERPP to Potrero Substation for this new proposed project site.

CCSF proposes to interconnect a new gas turbine generating facility to PG&E's Potrero 115 kV Switchyard. The proposed project will consist of three LM6000 combustion turbine generator units (CTGs) rated 50.5 MW each. The net output of the proposed project will be 145.1 MW. The on-line date of the proposed project is June 2007. A Facilities Study Report for the SFERPP was issued March 19, 2004 for the original site. In January of 2005, CCSF proposed a new site and interconnection plan for the SFERPP. The new site is approximately 0.3 miles away from the original site and the proposed new interconnection to PG&E's transmission grid will be via two new 115 kV underground generation tie lines. Each of the two new 115 kV underground lines is capable of transmitting the full 145.1 MW of SFERPP to PG&E's transmission grid. The original proposed generation tie lines were overhead. Both the Cal-ISO and PG&E agreed that a Feasibility Study was needed to determine if routing two redundant underground 115 kV circuits into Potrero Substation from the new SFERPP site would be feasible. It has been determined that the routing from the new project site is feasible and the required interconnection facilities were identified within the F/UFS and illustrated in the following diagram.



PG&E conducted the F/UFS using the following assumptions:

1. The maximum total output from the SFERPP is 151.5 MW from 3 LM6000 gas turbines. The expected total plant load is 6.4 MW. The maximum net output to the grid is 145.1 MW.
2. The expected on-line date is June 2007.
3. Each generator will have a step-up transformer. Each transformer is a three phase transformer, 13.8/115 kV grounded wye, rated 40/45/60 MVA @ 55/65 degree C temperature rise. The impedance is 10 - 12 % @ 40 MVA base.

The F/UFS determined that routing the two underground 115 kV circuits into Potrero Substation from the new SFERPP site is feasible.

A System Impact Study (SIS) was previously performed for this project. It was agreed to by PG&E, the Cal-ISO and CCSF that the change in site location would not change the results of the previous SIS and therefore a new SIS would not be required. Detailed information related to the previous SIS was included in our letter granting final interconnection approval dated May 28, 2005 and is therefore not repeated in this letter.

The previous SIS results for the SFERPP identified no adverse system impacts without the addition of Mirant's higher-queued Potrero Unit 7 Project. If Potrero 7 were built in the future, substantial network upgrades would be required and the CCSF would be responsible for the cost of mitigating the system impacts caused by its lower-queued SFERPP, based on the Cal-ISO Tariff Amendment 39 New Generator Interconnection Policy.

Direct Assignment facilities determined within the F/UFS and required for interconnecting the proposed project as related to the substation work is described below.

- At Potrero Switchyard Bus Section E, use two spare bay positions Bay 18 and Bay 19 to create two 115 kV line breaker positions.
- Install two new 115 kV dead-end structures for the two in-coming underground cables by CCSF.
- Install 115 kV underground cable riser support structures for UG potheads. Install surge arrestors on same structures.
- Install new underground conduits and fiber optic cable between the new Potrero Switchyard control building and SFERPP control building.
- Install new meters, protective relays, instrumentation and controls, and SCADA.

Network Upgrade facilities determined within the F/UFS and required for interconnecting the proposed project as related to substation work is described below.

- Install a new control building with a battery room, batteries, and charger.
- Install four (4) 115 kV bus selector air switches on existing structures.
- Modify the existing SFRAS to accommodate the new project.
- Install telecom equipment for EMS telemetry and SCADA.

The transmission line evaluation determined there would not be additional direct assignment transmission line work needed to interconnect the SFERPP.

CCSF will engineer, procure, construct, own, and maintain its project facility and the 115 kV underground generator tie lines.

Cal-ISO Approval for Interconnection

Based on the results of the F/UFS, the Cal-ISO reaffirms it's previous findings in it's letter dated May 28, 2004 in granting final interconnection approval to connect the SFERPP to the Cal-ISO controlled grid.

Should you have any questions about the review of this study, please call Larry Tobias at (916) 608-5763 (Ltobias@caiso.com) or me at (916) 351-4464 (jmiller@caiso.com).

Sincerely,

Original signed by

Jeffrey Miller
Regional Transmission Manager

cc:

Mr. Ralph Hollenbacher
Manager, Power Development
City and County of San Francisco, SFPUC
1155 Market St., 4th Floor
San Francisco, CA 94103

Ralph Hollenbacher (SFPUC via e-mail: rhollenbacher@sfwater.org)
Russell G. Stepp (SFPUC via e-mail: rstepp@sfwater.org)

Mark Hesters (CEC, Mhesters@energy.state.ca.us)

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Art McAuley (PG&E, AKM3@pge.com)
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Terry Chu (PG&E, TCC1@pge.com)

Armando Perez (ISO)
Rich Cashdollar (ISO)
Larry Tobias (ISO)
Gary Brown (ISO)
Judy Nickel (ISO)

Ty Larson (ISO via e-mail)
Ben Stephenson (ISO via e-mail)
Tom French (ISO via e-mail)
Grid Planning (via e-mail)

San Francisco Electric Reliability Project (SFERP)
(04-AFC-1)
Supplement A Data Response, Set 3C

Technical Area: Water and Soil Resources
CEC Author: Richard Latteri
SFERP Author: Matt Franck

BACKGROUND

Because the SFERP construction site will be larger than one acre, a National Pollution Discharge Elimination System (NPDES) permit for Stormwater Runoff from Construction Activities is required. To evaluate the potential impacts from stormwater runoff, it is necessary to identify run on/runoff quantities and characteristics for the SFERP site and areas associated with the project (laydown/staging areas, parking area, and linear facilities). Stormwater and erosion/sediment control plans are components of the SWPPP and are crucial to the evaluation of potential impacts related to construction of the SFERP.

DATA REQUEST

187. Provide a draft stormwater and an erosion/sediment control plan for the SFERP, the water pumping station, laydown area and associated linear facilities (potable and process water pipelines, natural gas pipeline, and transmission line) that includes the following:
- b) A discussion of the Best Management Practices (BMP) to be implemented which will divert off-site drainage from entering the site and a BMP construction sequence on the site map;

Response: Based on recent discussions with the San Francisco Port Authority, the SFERP Stormwater Pollution Prevention Plan (SWPPP) is currently being revised and will be submitted to CEC Staff by mid-August, 2005.

Energy Resources Conservation
and Development Commission

Application for Certification for the
SAN FRANCISCO ELECTRIC RELIABILITY
PROJECT (SFERP)

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Docket No. 04-AFC-1

PROOF OF SERVICE

I, Kiana Davis, declare that on July 19, 2005, I deposited copies of the attached **INFORMAL DATA RESPONSE, SET 7A (Responses to Informal Data Requests in the area of: Cultural Resources)**

in the United States mail in San Francisco, California, with first-class postage thereon fully prepaid and addressed to all parties on the attached service list.

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



Kiana Davis

SERVICE LIST

<p>Barbara Hale, Power Policy Manager San Francisco Public Utilities Commission 1155 Market Street, 4th Floor San Francisco, CA 94102</p>	<p>Applicant Project Manager Karen Kubick SF Public Utilities Commission 1155 Market St., 8th Floor San Francisco, CA 94103</p>
<p>Steve De Young De Young Environmental Consulting 4155 Arbolado Drive Walnut Creek, CA 94598</p>	<p>John Carrier CH2MHill 2485 Natomas Park Drive, Suite 600 Sacramento, CA 95833-2943</p>
<p>Lynne Brown - Member, CARE Resident, Bayview Hunters Point 24 Harbor Road San Francisco, California 94124</p>	<p>Emilio Varanini III Special Counsel California Power Authority 717 K Street, Suite 217 Sacramento, CA 95814</p>
<p>Electricity Oversight Board 770 L Street, Suite 1250 Sacramento, CA 95814</p>	<p>Independent System Operator Jeffery Miller 151 Blue Ravine Road Folsom, CA 95630</p>
<p>Department of Water Resources SERS Dave Alexander 3301 El Camino Avenue, Ste. 120 Sacramento, CA 95821-9001</p>	<p>Jeffrey S. Russell Vice President, West Region Operations Mirant California, LLC 1350 Treat Blvd., Suite 500 Walnut Creek, CA 94597</p>
<p>Michael J. Carroll Latham & Watkins LLP 650 Town Center Drive, Suite 2000 Costa Mesa, CA 92626</p>	<p>Potrero Boosters Neighborhood Association Dogpatch Neighborhood Association Joseph Boss 934 Minnesota Street San Francisco, CA 94107</p>
<p>Robert Sarvey 501 West Grantline Road Tracy, CA 95376</p>	<p>Greenaction for Health & Environmental Justice c/o Marc Harrison Karl Krupp One Hallidie Plaza #760 San Francisco, CA 94706</p>
<p>San Francisco Community Power c/o Steven Moss 2325 Third Street # 344 San Francisco, CA 94107</p>	<p>Californians for Renewable Energy, Inc. (CARE) Michael E. Boyd, President 5439 Soquel Drive Soquel, California 95073</p>