



**CH2MHILL**

July 23, 2004  
184288

<b>DOCKET</b> 04-AFC-1
DATE <u>JUL 23 2004</u>
RECD. <u>JUL 23 2004</u>

CH2M HILL  
2485 Natomas Park Drive  
Suite 600  
Sacramento, CA 95833-2397  
Tel 916.920.0300  
Fax 916.920.8463

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

RE: Informal Data Response, Set 1  
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 the Informal Data Response, Set 1, in response to Staff's Informal Data Requests dated July 8, 2004. We are filing copies of this Informal Data Response both electronically and in hard copy.

Please call me if you have any questions.

Sincerely,

CH2M HILL

John L. Carrier, J.D.  
Program Manager

c: Project File  
Proof of Service List

---

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

**INFORMAL DATA RESPONSE, SET 1**  
(Informal Responses to Data Requests: WS-1 through WS-4 and VR-  
85A through VR-85C)

Submitted by  
**CITY AND COUNTY OF SAN FRANCISCO**

July 23, 2004



**CH2MHILL**

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

**SAN FRANCISCO ELECTRIC RELIABILITY PROJECT  
(04-AFC-1)  
INFORMAL DATA RESPONSES, SET 1A**

**Technical Area: Worker Safety and Fire Protection**

**Author:** Alvin Greenberg, Ph. D.

**Technical Senior:** Rick Tyler

**ISSUE**

In order to assess fire prevention methods at the proposed facility, it is necessary to know how much on-site storage capacity of water will be available for fire fighting purposes and what type of emergency backup pump system would be used. It is also necessary to know what fire suppression measures would exist on-site during the construction phase of the project.

**DATA REQUEST**

**WS-1.** Please describe the fire suppression measures that would exist on-site during construction.

**Response:** During construction, fire suppression will be handled locally through the use of portable fire extinguishers located throughout the construction site. Safety procedures addressing fire protection will be part of the construction safety program to be implemented during construction. The City will provide fire protection backup for fires that cannot be contained by portable extinguishers. The City will notify the San Francisco Fire Department of any fire incidents on the SFERP regardless of size.

**WS-2.** Please provide the amount of on-site storage capacity of water that would be available for fire fighting at the SFERP during operations.

**Response:** The fire protection system will utilize the existing City fire water system for supply. The plant will have a fire main loop with hydrants and building sprinkler systems. This loop will have two connections to the existing City fire water supply in 23<sup>rd</sup> Street. (Refer to Section 8.14.5.1.3 of the AFC). There will be no onsite storage.

**WS-3.** Describe any pumps which might be necessary to provide increased water pressure required to serve firefighting systems.

**Response:** It is not anticipated that there will be a need to boost the water pressure of the City's fire protection system.

**WS-4.** Please provide a description of any emergency backup fire pumps proposed for this project.

**Response:** There are no backup firewater pumps proposed.

**SAN FRANCISCO ELECTRIC RELIABILITY PROJECT  
(04-AFC-1)  
INFORMAL DATA RESPONSES, SET 1A**

**Technical Area: Visual Resources**

**Author:** Mark R. Hamblin and William Walters

**DATA REQUEST**

VR-85A. The response assumes that all three turbines are in operation for each ambient condition shown in Table VR-85, correct? If not please describe the turbine operating conditions assumed for each ambient condition.

**Response:** That is correct; the response is based on the assumption that all three combustion turbines are operating at full load at each ambient condition shown.

VR-85B. The response seems to indicate that only one cell of the cooling tower will operate when the chillers are off (i.e. 50F and lower), but not under other low chiller load conditions (i.e. other conditions when the cooling tower is operating at well less than 50% of its design load), is this correct? We plan to modify the cooling tower heat balance to a single cell operating heat balance during the conditions when the cooling tower will actually only operate with a single cell, so we need to be sure under what conditions (maximum ambient temperature, maximum heat rejection, etc.) the tower will operate with only a single cell.

**Response:** The determination as to the number of cells in operation under any given load is subject to the discretion of the plant operator. Ambient temperature is only one consideration. The CEC Staff is free to make alternative operating assumptions regarding the number of cells in operation at any given time; however, the City is not proposing any restrictions on the judgment of plant operators on this issue.

VR-85C. Charting the heat rejection vs. ambient temperature for 52F, 59F and 80F indicates an almost linear relationship between heat rejection and ambient temperature for these three points, so for our model input development we plan to assume that the heat rejection for the cooling tower increases linearly with temperature for temperatures above 52F. Additionally, the non-chiller operations at 36F and 50F show identical heat rejection values, so we will assume that the heat rejection at ambient temperatures of 50F and lower is constant, and we will use linear interpolation to obtain the heat rejection value for 51F.

**Response:** The City understands the assumptions that the CEC Staff is making.

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

APPLICATION FOR CERTIFICATION	)	Docket No. 04-AFC-1
FOR THE SAN FRANCISCO ELECTRIC	)	
RELIABILITY PROJECT	)	PROOF OF SERVICE
<hr/>		*Revised 7/9/04

I, Anar Bhimani, declare that on July 23, 2004, I deposited copies of the attached Informal Data Response, Set 1 in the United States mail at Sacramento, CA with first class postage thereon, fully prepaid, and addressed to the following:

**DOCKET UNIT**

Send the original signed document plus 12 copies to the following address:

**CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 01-AFC-17  
DOCKET UNIT, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512**

In addition to the documents sent to the Commission Docket Unit, also send individual copies of all documents to:

**APPLICANT**

Jesse Blout - Economic Development  
Director  
Office of the Mayor  
City and County of San Francisco  
1 Dr. Carlton B. Goodlett Place,  
Room 200  
San Francisco, CA 94102-4641

Applicant Project Manager  
Julie Labonte, P.E.  
San Francisco Public Utilities  
Commission  
General Manager's Office  
1155 Market St., 11th Floor  
San Francisco, CA 94103

**APPLICANT'S CONSULTANTS**

Steve De Young  
De Young Environmental Consulting  
4155 Arbolado Drive  
Walnut Creek, CA 94598

John Carrier  
CH2MHill  
2485 Natomas Park Drive, Suite 600  
Sacramento, CA 95833-2943

**COUNSEL FOR APPLICANT**

Jeanne Sole  
San Francisco City Attorney  
City Hall, Room 234  
1 Dr. Carlton B. Goodlet Place  
San Francisco, CA 94102-4682

**INTERESTED AGENCIES**

Emilio E. Varanini, III, General  
Counsel  
California Power Authority  
910 P Street, Suite 142A  
Sacramento, CA 95814

Independent System Operator  
Jeffery Miller  
151 Blue Ravine Road  
Folsom, CA 95630  
jmiller@caiso.com

Electricity Oversight Board  
770 L Street, Suite 1250  
Sacramento, CA 95814

**INTERVENORS**

Jeffrey S. Russell  
Vice President, West Region  
Operations  
Mirant California, LLC  
1350 Treat Blvd., Suite 500  
Walnut Creek, CA 94597

Michael J. Carroll  
Latham & Watkins LLP  
650 Town Center Drive, Suite 2000  
Costa Mesa, CA 92626

Potrero Boosters Neighborhood Asso.  
Dogpatch Neighborhood Asso  
Joseph Boss  
934 Minnesota Street  
San Francisco, CA 94107  
joeboss@joeboss.com

Robert Sarvey  
501 West Grantline Road  
Tracy, CA 95376  
SarveyBob@aol.com

Greenaction for Health &  
Environmental Justice  
c/o Marc Harrison  
Karl Krupp  
One Hallidie Plaza #760  
San Francisco, CA 94706

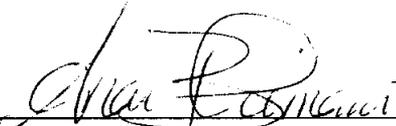
San Francisco Community Power  
c/o Steven Moss  
2325 Third Street # 344  
San Francisco, CA 94107  
steven@sfpower.org

**\*Californians for Renewable Energy,  
Inc. (CARE)**

**Michael E. Boyd, President  
5439 Soquel Drive  
Soquel, California 95073  
michaelboyd@sbcglobal.net**

**\*Lynne Brown D Member, CARE  
Resident, Bayview Hunters Point  
24 Harbor Road  
San Francisco, California 94124  
L\_brown123@yahoo.com**

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

  
\_\_\_\_\_  
Anar Bhimani