SAN FRANCISCO ELECTRIC RELIABILITY PROJECT
(04-AFC-01)

DOCKET
04-AFC-1
DATE JAN 4 2006
RECD JAN 6 2006

Informal Data Request - January 4, 2006

Technical Area: **Soil and Water Resources**
Authors: **Mark Lindley and Vince Geronimo (PWA)**

BACKGROUND

The City of San Francisco has proposed a change to the supply source for treatment process water and cooling water identified in Supplement A of the San Francisco Electric reliability Project (04-AFC-1) in a letter to the CEC on 12/20/05. The new supply source will be treated secondary effluent from the Southeast Waste Water Treatment Plant (SEWWTP). The amendment resulted in a change to the on-site treatment requirements from primary, secondary, and tertiary treatment to a system that requires only tertiary treatment. The process will still result in the production of Title 22-quality recycled water.

The secondary effluent from the SEWWTP has been identified as having high levels of salinity as a result of infiltration of Bay waters into the sewers and box structures near the water (Informal Data Response, Set 6A Questions S&W 6-3 & 6-4). The facility description, in the 12/20/05 CCSF letter, does not provide sufficient information to address the high levels of salinity in the effluent. Staff requires a more in depth description of the linear facilities, effluent-water supply constituents and demand, tertiary treatment process, discharge requirements, and regulations.

DATA REQUESTS

Supply

- Provide a detailed description of the water supply connection; identify major construction constraints for the delivery pipeline to the site.

- Provide the physical and chemical characteristics of the treated secondary effluent from the SEWWTP – Provide a table similar to the Estimate of Wastewater Water Quality (Table 8.14-8 in Supplement A). Provide the range of expected Wastewater Water Quality in the table.

- Provide the Average and Maximum Daily and Annual Water Demand from the SEWWTP source.

- Provide the estimated the annual maximum and minimum peak flowrate in the SEWWTP effluent line discharging to the Bay?

PROOF OF SERVICE (REVISED 8/03/05) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 1/06/06
NB

- Provide a description of the hydraulic pressure and pressure fluctuations anticipated at the connection to the SEWWTP effluent forcemain?

- Provide a description of the SEWWTP effluent to provide continuous service to SFERP? Are interruptions in service expected due to annual maintenance or other expected or unexpected conditions?

- During extreme runoff events, the SEWWTP may discharge untreated or partially treated runoff and wastewater that may not meet secondary treatment standards to San Francisco Bay. Will SFERP receive partially treated effluent during these events? If so, how will SFERP treat water from SEWWTP that does not meet the secondary treatment standards?

- Provide a revised estimate for annual back-up water anticipated as a result of the change in source water and change to the treatment process.

- Will fresh supplies be blended with product water?

- Provide a new Will-Serve Letter from SFPUC that identifies the new supply source. The letter should acknowledge the point of connection to existing SFPUC infrastructure.

Tertiary Treatment Process

- Provide a detailed description of the ultra-filtration and disinfection pretreatment system.

- Provide a detailed description of the single stage reverse osmosis system.

- Provide a description of the chemicals required for onsite tertiary treatment of the treated secondary effluent from the SEWWTP not otherwise identified in Supplement A. Attach MSDS if necessary.

- Provide the following revised figures based on the change to the onsite treatment process:
    - Site Layout
    - Water Balance Diagram

Wastewater

- Provide an estimate of the Average and Maximum Daily and Annual and Maximum Annual Operational Wastewater Discharge from SFERP. Provide a table similar to the Table 8.14-7 in Supplement A.

- As a result of the high salinity levels in the effluent: Provide a description of the method to be used to dispose of desalting concentrates and brines resulting from the reverse osmosis system and discuss the regulatory requirements.

- Provide a description of the wastewater discharge location and requirements of the tertiary treatment facility. Describe the method of disposal and verify that the wastewater water quality meets the SFERP planned discharge permit requirements.

Regulations

- Title 22 of the CCR - Verify implementation procedures by DHS & RWQCB's Water Reuse Permit Program (General Water Reuse Order 96-011) will be established through sampling, testing, and reporting.

- If the treatment process will discharge to the CCSF Combined Sewer System, verify that the discharge will meet the discharge permit requirements of Article 4.1 of the City's Public Works Code. Limitations for industrial discharges to the CCSF Combined Sewer System were earlier presented in Table 8.14-2 in Supplement A.

- Has DHS been notified of the change to the proposed water supply and planned treatment facility? Verify that the Engineer's Report will be completed for the new purification system?

Construction SWPPP

Staff has not reviewed the revised SWPPP. Discharge of eroded soils impacted by hazardous levels of Arsenic, TPH, and PAHs during construction at the site could result in potentially significant water quality impacts to the Bay. Previous estimates of soil erosion from the site during construction provided in the AFC indicate that there is a potential for 16 to 18 tons of soil to erode from the site during construction.

The recently updated stormwater management plans for the site include use of a vegetated swale to discharge runoff directly to San Francisco Bay. A properly designed and maintained vegetated swale should be a sufficient post-construction stormwater quality BMP. However, during construction more extensive erosion control and treatment control BMPs will be required to prevent discharge of eroded soils to the Bay. In addition, the construction SWPPP should also provide details for how excavated soils and groundwater pumped while dewatering excavations will be handled during construction to prevent discharge to the Bay. Treatment control measures including a sediment basin and/or a multi-stage tank with media filtration may be required to prevent

discharge of eroded soils and groundwater with hazardous levels of Arsenic, TPH, and PAHs.

- Please submit a revised SWPPP that presents detailed construction BMPs that will limit soil erosion and provide effective treatment control to prevent discharge of hazardous soils and groundwater from the site.

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

APPLICATION FOR CERTIFICATION FOR THE SAN FRANCISCO ELECTRIC RELIABILITY PROJECT

Docket No. 04-AFC-01
PROOF OF SERVICE
Revised 8/03/05

DOCKET UNIT

Instructions: *Send an original signed document plus 12 copies* ***or*** *an electronic copy plus one original paper copy to the address below:*

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 04-AFC-01
DOCKET UNIT, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

Also send a printed ***or*** *electronic copy of all documents to each of the following:*

APPLICANT

Barbara Hale, Power Policy Manager
San Francisco Public Utilities Commission
1155 Market Street, 4th Floor
San Francisco, CA 94102
BHale@sfwater.org

Karen Kubick
Applicant Project Manager
SF Public Utilities Commission
1155 Market St., 8th Floor
San Francisco, CA 94103
kkubick@sfwater.org

APPLICANT'S CONSULTANTS

Steve De Young
De Young Environmental Consulting
4155 Arbolado Drive
Walnut Creek, CA 94598
steve4155@astound.net

John Carrier
CH2MHill
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833-2943
jcarrier@ch2m.com

COUNSEL FOR APPLICANT

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

INTERESTED AGENCIES

Emilio Varanini III
Special Counsel
California Power Authority
717 K Street, Suite 217
Sacramento, CA 95814
drp.gene@spcglobal.net

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

*** Donna Jordan**
CA Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
djordan@caiso.com

*** Dept. of Water Resources**
SERS
Dave Alexander
3301 El Camino Avenue, Ste. 120
Sacramento, CA 95821-9001

INTERVENORS

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

Michael J. Carroll
Latham & Watkins LLP
650 Town Center Drive, Suite 2000
Costa Mesa, CA 92626
michael.carroll@lw.com

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

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 – Member, CARE
Resident, Bayview Hunters Point
24 Harbor Road
San Francisco, California 94124
L_brown123@yahoo.com

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

DECLARATION OF SERVICE

I, **Nathan Braden** declare that on **January 6, 2006**, I deposited copies of the attached **SFERP Informal Data Request—Soil & Water for San Francisco Electric Reliability Project**, 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. Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. I declare under penalty of perjury that the foregoing is true and correct.

[signature]

CEC INTERNAL
DISTRIBUTON LIST ONLY

Parties DO NOT mail to the following individuals. The Energy Commission Docket Unit will internally distribute documents filed in this case to the following:

JAMES D. BOYD, Commissioner
Presiding Member
MS-34

JOHN L. GEESMAN, Commissioner
Associate Member
MS-31

Stan Valkosky
Hearing Officer
MS-9

Bill Pfanner
Project Manager
MS-15

Dick Ratliff
Staff Counsel
MS-14

Margret J. Kim
Public Adviser
MS-12