

CALIFORNIA ENERGY COMMISSION

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June 4, 2004

Ms. Julie Labonte, P.E.
San Francisco Public Utilities Commission
City and County of San Francisco, General Management Office
1155 Market Street, Floor 11
San Francisco, CA 94103

Dear Ms. Labonte:

RE: SAN FRANCISCO ELECTRIC RELIABILITY PROJECT (SFERP) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission requests 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.

These data requests are being made in the areas of: Air Quality (#1-11); Alternatives Analysis (#12-18); Cultural Resources (#19-24); Geologic Hazards and Resources (#25-26); Hazardous Materials Management (#27-29); Land Use (#30-39); Noise (#40-41); Public Health (#42-47); Soil and Water Resources (#48-55); Traffic and Transportation (#56-69); Transmission System Engineering (#70-79); Visual Resources (#80-87); and Waste Management (#88-91). Written responses to the enclosed data requests are due to the Energy Commission staff on or before July 6, 2004, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 10 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

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If you have any questions regarding the enclosed data requests, please call me at (916) 654-4206.

Sincerely,

BILL PFANNER
Energy Facility Siting Project Manager

Enclosure

cc: Docket (04-AFC-1)
Proof of Service List

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Air Quality

Author: Tuan Ngo, P.E.

BACKGROUND

In the application for certification (AFC), the City of San Francisco (the City) specifies that offsets for oxides of nitrogen (NOx) and volatile organic compound (VOC) will be acquired from owners of emission reduction credits (ERC) within the city. The City commits to provide the list of ERCs no later than October 7, 2004, when the Preliminary Determination of Compliance (PDOC) will be released. Because staff needs to provide an analysis on whether such offsets are appropriate and effective in mitigating the project emission increases, an earlier public release date will be helpful.

DATA REQUEST

1. Please consider an earlier release of the offset package, e.g., by the end of August, 2004.

BACKGROUND

In the AFC, the City commits to develop a PM10 mitigation plan (AFC, pp. 8.1-48); however, no specific detail about this plan is provided.

DATA REQUEST

2. Please provide a detailed discussion of the goals of the PM10 mitigation plan.
3. Please discuss the progress to-date on the PM10 mitigation plan and provide a schedule for its completion.
4. Because sulfur oxides (SOx) and ammonia have the potential to contribute to fine particulate (PM10 and PM2.5) formation, please describe whether the PM10 plan would contain any element to mitigate SOx and ammonia-derived fine particulates.

BACKGROUND

Applicant needs to provide background information on the Cumulative Air Impact Analysis.

DATA REQUEST

5. Please provide the progress for the cumulative air quality impact analysis following the protocol proposed in the AFC, Appendix 8.1G and a schedule for when this information will be completed.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

The AFC identifies that a selective catalytic reduction (SCR) system will be utilized to control nitrogen oxide (NO_x) emissions to 2.5 part per million (ppm) with an ammonia slip of 10 ppm corrected to 15% excess oxygen (@15%O₂).

DATA REQUEST

6. Please provide vendor certification that ammonia slip lower than 10 ppm is not technically and cost-effectively possible for these combustion turbines.

BACKGROUND

The AFC identifies both SCR and SCONO_x technologies as technologically feasible for the project (AFC, Appendix E, pp. E-9), but the SCONO_x technology does not offer any benefits and would have higher cost than SCR (\$18,671 per ton of NO_x versus \$7,253 per ton of NO_x). Therefore, the City selected SCR as the best available control technology (BACT) for the project. It is unclear whether the cost effectiveness analysis has taken into account that the SCONO_x can operate at less than 2 ppm with no ammonia slip, and exhibits lower CO and VOC emissions than SCR.

DATA REQUEST

7. Please provide detailed discussions about why the City believes that SCONO_x offers no benefits over the SCR control technology.
8. Please provide the cost-effectiveness calculations for SCONO_x and SCR as cited in the ONSITE SYCOM Energy Corporation report.

BACKGROUND

The initial commissioning of the project may experience emissions that exceed the limits that would be required during normal operation; however, no mitigation is proposed.

DATA REQUEST

9. Please provide discussion for any proposed mitigation during the commissioning period.

BACKGROUND

Table 8.1D-4 of the AFC identifies that construction of the facility will result in impacts of 14.9 and 6.4 µg/m³ for PM₁₀ and PM_{2.5}, respectively. There are no discussions of the inputs or assumptions used in the model for PM₁₀ and PM_{2.5}.

The model predicts that the impacts for PM₁₀ and PM_{2.5} would be greatest along the fence line of the facility. Since the public has access to the property fence, additional mitigation beyond those proposed in the AFC may be required to mitigate these impacts.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

DATA REQUEST

10. Please provide detailed descriptions and assumptions used to separate the PM10 and PM2.5 source inputs to the model.
11. Please provide additional mitigation steps that the City will take to ensure that the construction of the project will not cause adverse impacts to the public in the adjacent area.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Alternatives Analysis

Author: Susan Lee

BACKGROUND

The alternatives analysis must be based on a complete understanding of the electric transmission system and location of major infrastructure in and south of San Francisco because power plant site alternatives need to be located where adequate transmission is present (or can be constructed).

DATA REQUEST

12. Please provide a detailed map of existing utilities (including major water and natural gas pipelines) within and adjacent to the eastern side of the City of San Francisco and along the eastern sides of the cities between the San Francisco Airport and San Francisco.

BACKGROUND

Evaluation of potential alternative sites for the PSA/FSA would be most efficient if based on a complete understanding of the sites considered by the CCSF in its siting planning process.

DATA REQUEST

13. Regarding alternative sites considered in the AFC:
 - a. Please provide a description of the alternative sites that were considered in the planning and screening phase of AFC preparation, but were eliminated from consideration and not presented in the AFC. Describe the rationale for the elimination of each alternative. Please also include the locations and distances for access to electrical transmission, natural gas, and water supply.
 - b. As described on page 9-4 in Section 9.4.1, the Proposed Project would tie into Potrero Substation, PG&E's natural gas main on 23rd and Illinois, and the City's combined sewer system with an onsite treatment system. Although distances are listed in Table 9-1, where specifically would each of the identified alternatives access water, transmission, and natural gas?
14. What is the minimum parcel size necessary to site one, two, three, and four of the turbines?
15. Please explain the CCSF's rationale for considering alternative sites only in the immediate area of the Potrero Power Plant for the siting of one or all of the turbines.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

The AFC in Section 9.1 states that the Cal-ISO's load flow study will determine the amount of power needed to provide adequate electric reliability to the CCSF. The CCSF appears also to rely on the Cal-ISO for guidance on the beneficial locations of the new turbines.

DATA REQUEST

16. Page 9-3 in Section 9.4, Proposed and Alternative Sites, discusses a recent Cal-ISO analysis that indicates that all of Hunters Point Power Plant (HPPP) can be retired (which is one of the project objectives) if at least three of the four combustion turbines are located north of Martin Substation. Please provide a copy of the Cal-ISO analysis and conclusion.
- a. Does the Cal-ISO state that HPPP units could not be retired if the new turbines were located south of the Martin Substation?
 - b. Does the Cal-ISO analysis assume the construction of PG&E's Jefferson-Martin 230 kV Transmission Project? If it does not, how many of the turbines would need to be north of Martin Substation to allow for closure of HPPP assuming that the Jefferson-Martin 230 kV line is operational?

BACKGROUND

The CCSF intends to sell the power produced by the Electric Reliability Project to the California Department of Water Resources through a power purchase agreement. As a result, it is important to understand how the requirements of that agreement affect or restrict alternative sites.

DATA REQUEST

17. Section 3.02 of the Department of Water Resources (DWR) Power Purchase Agreement and Implementation Agreement says that the "City will use its best efforts to identify and control a site(s) at or near the City or at the San Francisco International Airport for the location of the Facility either through the optioning of a site or an equivalent governmental memorandum of understanding, acquisition of a site, or the leasing thereof, for a term sufficient to comply with the provisions of the Facility Agreements."
- a) Please explain how the DWR Power Purchase Agreement and Implementation Agreement affected the siting of alternatives? Why were no sites near the airport studied when the DWR agreement specifically presents the airport sites as viable options?
 - b) Please explain the relevance of the DWR Power Purchase Agreement to the alternatives siting process. Are there cost limitations in the DWR Agreement that might prohibit the use of certain sites?

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

The alternatives analysis must be based on a complete understanding of the electric transmission system and location of major infrastructure in and south of San Francisco because power plant site alternatives need to be located where adequate transmission is present (or can be constructed).

DATA REQUEST

18. The CPUC is currently conducting environmental review of the Potrero-Hunters Point 115 kV Project (an underground 115 kV line that would connect the Potrero and Hunters Point Switchyards). This project will be undergoing CEQA review during the next 6 months or so. Is the installation of the Potrero-Hunters Point 115 kV Project considered to be essential to the SFERP? Please describe how power would be distributed from the Potrero Switchyard, and whether any capacity limitations exist, with or without the proposed new line.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Cultural Resources

Author: Gary Reinoehl

BACKGROUND

The City and County of San Francisco state that the Meter House, a building that meets the eligibility requirements for the California Register of Historical Resources (CRHR), would be rehabilitated for use as an administrative and control building. The California Energy Commission as a state agency is mandated by Health and Safety Code 18961 to use the alternative provisions of these regulations and consult with the State Historical Building Safety Board to obtain its review prior to undertaking or making decisions on variances or appeals which affect historical buildings. Staff needs the following information to complete the assessment.

DATA REQUEST

19. Please provide a preliminary design for the Meter House that details changes in historic fabric and other alterations from the original design of the building.
20. If a preliminary design is not yet available, please indicate a schedule for development and submission of the design.
21. Please indicate alternative provisions (see Health and Safety Code 18961) that would be used in the rehabilitation of the Meter House.

BACKGROUND

The City and County of San Francisco provided background documents for the Central Waterfront Cultural Resources Survey during the hearings for the Potrero Power Plant. The survey suggested that an eligible Central Waterfront Industrial District (CWD) exists within the survey boundary of Sixteen Street, Interstate 280, Islais Creek Channel and San Francisco Bay. The Central Waterfront Industrial District includes the Pier 70, the Dogpatch Historic District, and some buildings within the Potrero Power Plant parcel and the Spreckels Sugar Warehouses. The proposed power plant would place modern intrusions into the middle of the Central Waterfront Industrial District. When the AFC was submitted, the CWD had not been designated as a historical resource under a local ordinance.

DATA REQUEST

22. Please provide copies of a designation or resolution if the City or County of San Francisco has designated the Central Waterfront Industrial District as an historic district or a significant resource under a local ordinance or by resolution.
23. Please provide copies of correspondence with the Office of Historic Preservation regarding the eligibility of the CWD for the CRHR.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

Although no archeological resources were identified as a result of the records search and field survey performed by the applicant for the pipeline route needed for the Water Pipeline Corridor, it should be possible to identify potential subsurface resources that could be impacted by the pipeline construction. The 1899 Sanborn map suggests that portions of the pipeline would be placed in old land features, shoreline areas, and filled areas. Historical research and historic maps may indicate the locations of archeological resources along the pipeline route. An example of such a resource that could be impacted by the proposed pipeline is the San Francisco Cordage/ Tubbs Cordage ropewalk that appears on historic maps and is documented in several area historical resources inventories. In order to adequately identify potential impacts, staff needs additional information.

DATA REQUEST

24. Please complete a literature review and consult historic maps to identify potential subsurface cultural resources that could be impacted by the proposed pipelines. The literature review should include, but not be limited to, the following:
- Potrero 7: Phase 1 Cultural Resources Overview and Inventory (Wirth Associates 1979);
 - Central Waterfront Cultural Resources Survey (San Francisco Planning Department 2001); and
 - Dogpatch Historic District Survey (Christopher VerPlanck 2001).
 - Mirant Corporation response to staff Data Requests, Set 6, (Cultural Resources) Nos. 216 through 220, Cooling Tower System Amendment to the Potrero Power Plant Unit 7 Project (00-AFC-4). Submitted to California Energy Commission, September 11, 2003.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Geologic Hazards and Resources

Author: Dr. Patrick Pilling, P.E., G.E.

BACKGROUND

Section 8.15.3.5 and 8.15.3.5.6 state that a site-specific geotechnical investigation has been conducted at the project site. Site-specific subsurface information is critical in assessing potential geologic hazards.

DATA REQUEST

25. Please submit a copy of the site-specific geotechnical investigation, as well as any other geotechnical investigations, for this site.

BACKGROUND

Section 8.15.3.5.3 of the AFC states that the depth to ground water at the site is approximately 15 feet, while Appendix 10G.3.4 states the depth to ground water is approximately 30 feet. The depth to ground water is critical in assessing liquefaction potential.

DATA REQUEST

26. Please clarify/verify the depth to ground water at this site.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Hazardous Materials Management

Author: Alvin Greenberg, Ph.D.

Technical Senior: Rick Tyler

BACKGROUND

Table 8.12-4 of the AFC indicates that an antiscalant will be used by the proposed SFERP to prevent scale in reverse osmosis membranes. In order to adequately analyze potential impacts from this facility, the identity of all proposed chemicals is required.

DATA REQUEST

27. Please provide the MSDS for the antiscalant proposed for use at the SFERP.
28. Please provide the MSDS for the Coagulant Aid Polymer (NALCO NALCOLYTE 8799), the Corrosion Inhibitor (NALCO 8305 Plus), and the Dispersant (NALCO TRASAR 23263) proposed for use at the SFERP.

BACKGROUND

In order to fully assess impacts from the transportation of aqueous ammonia, the identity and location of the ammonia supplier is necessary.

DATA REQUEST

29. Please provide the name and location of the aqueous ammonia supplier the City plans to use.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Land Use

Author: David Flores

BACKGROUND

In the 1999, the City/County of San Francisco adopted an interim zoning control ordinance which provided for an Industrial Protection Zone and a Mixed Use Housing Zone within the Heavy Industrial zones in and around the project site. This was in response to the housing shortage needs within the San Francisco area.

DATA REQUEST

30. Please discuss whether this interim ordinance is still in effect or has been extended to allow loft-type housing developments in the industrially zoned areas.

BACKGROUND

The proposed project site is still under the ownership of Mirant Potrero LLC. The Mirant property currently consists of ten assessor's parcel numbers totaling approximately 20 acres.

The application indicates that the project will be located on Assessor's Block 4175, Lot 6.

Assessor's parcels are not legal land division parcels. Assessor's parcels are generated by a County Assessor's Office as a means of placing a value on property or portion thereof for the purpose of property taxation in accordance to the California Revenue and Taxation Code. The County Assessor does not divide or create parcels of land in conducting this process. The assignment of an Assessor's Parcel Number to a property provides a convenient and quick location reference for the County Assessor to identify a property on the property assessment roll within a County. Legal land division parcels are established in accordance to the procedures and the requirements set forth in the State Subdivision Map Act (Government Code section 66410 – 66499.58).

The status and number of legal parcels of record for this project is unknown based on the current information provided in the AFC.

DATA REQUEST

31. Please provide the legal description for the newly created parcel and revised parcel map.
32. Please explain whether the applicant, as the City/County of San Francisco is going to be required to file a parcel map with the City's Public Works Office to create the parcel(s).

If not, explain the land division procedure used to create the parcel(s) totaling 4.5 acres.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

33. Does the applicant have one legal parcel or some other number of parcels?
34. Provide a copy of the recorded final map, lot line adjustment map, or Certificate of Compliance for the property (ies).

BACKGROUND

A review of Figure 1.3 (Site Plan) and the other portions of the project description in the application did not provide enough information to indicate how the project relates to the proposed project site and local agency regulatory requirements. City/County of San Francisco Zoning Code (Article 1.2) provisions require that there be landscaping and building setbacks, adequate street right-of-way and street improvements as necessary. Since the diagram (i.e., Figure 1.3) does not provide the above referenced regulatory information, it is difficult to ensure compliance with the City/County standards.

DATA REQUEST

35. Revise Figure 1.3 Site Map in the application to provide the following:
 - a) Location of all existing exterior lot lines with distances to existing and proposed structures.
 - b) Location of the centerlines of Humboldt Street, 23rd Street and Illinois Street with distances to existing, exterior property lines.
 - c) Location of existing and proposed curbs and gutters with distances to exterior property lines.
 - d) Locations with distances for any areas of building setback that will be landscaped.

BACKGROUND

The City/County of San Francisco Sign Ordinance (Article 6) governs the size, location, and type of signs permitted on the project site. The AFC provides no discussion of the signs that will be used. It is not possible to demonstrate compliance with the City Zoning ordinance from existing data submitted.

DATA REQUEST

36. Provide details on the project's sign program that includes the following:
 - a) The location, size and number of all signs proposed.
 - b) The materials that will be used to construct the signs.
 - c) The lighting technique that will be used for the signs.
 - d) The height of all proposed signs.
 - e) The type of signs to be used (For example, a monument sign or a building mounted sign).

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

- f) If signs will be located on buildings identify the distance from the surface of the sign to the surface of the structure to which it will be attached.
- g) Architectural renderings of all signs proposed.
- h) The content of each sign proposed.

BACKGROUND

The City/County of San Francisco Zoning Code (Article 1.2) restricts lot coverage in the Heavy Industrial Zoning District that includes the project site. The site plan does not provide calculations of the site area and the aerial extent of proposed roofed structures. This data is required to evaluate project compliance with zone lot coverage requirements.

DATA REQUEST

- 37. Provide calculations to show the project's consistency with the City of San Francisco's Heavy Industrial Zoning District lot coverage standards with respect to:
 - a) The aerial extent of the project site (i.e., the entire ultimate legal parcel(s) proposed for development) in square feet.
 - b) The aerial extent of proposed and existing structures with roofs in square feet.

BACKGROUND

The City/County of San Francisco Zoning Regulations requires parking spaces for the new industrial uses to be based on a ratio related to the number of employees. The Parking Regulations (Article 1.5) also require that loading spaces be designed to avoid interference with required parking access and circulation. Materials submitted by the applicant do not illustrate the location and number of parking spaces. This data is necessary to ensure compliance with City/County standards.

DATA REQUEST

- 38. Provide the location, layout and numbers of parking spaces to be developed on the site. This information may be included in the revised Figure 1.3 Site Plan, or in a separate, related exhibit.
- 39. Delineate the location and dimensions of any loading docks in the revised Figure or the separate exhibit.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Noise
Author: Steve Baker

BACKGROUND

The project will include four natural gas booster compressors, located near the southwest portion of the project site. While the AFC gives a value for the noise generated by these compressors, and lists mitigation measures to reduce this noise (AFC Table 8.5-11), there is no discussion of the impact of the noise from these machines on the nearest sensitive receptors.

DATA REQUEST

40. Please provide an estimate of the noise impact of the gas booster compressors on the nearest sensitive receptors. If this noise has been included in estimates of plant noise impacts, please so state.

BACKGROUND

The project will include three variable-speed water pumps to supply water to the plant from the City's water pollution control plant. These pumps will be located to the south of the project site, on Marin Street. No estimate of the noise impacts of these pumps on sensitive receptors appears in the AFC.

DATA REQUEST

41. Please provide an estimate of the noise impact of the water supply pumps on the nearest sensitive receptors.

San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)

Technical Area: Public Health
Author: Alvin Greenberg, Ph.D.
Technical Senior: Mike Ringer

BACKGROUND

Section 8.6 **Public Health** characterizes the health risks and hazard from toxic air pollutants. Appendix 8.1C provides the screening health risk assessment in more detail. Section 8.1 assesses air quality impacts of the project and Appendix 8.1A provides emissions and operating criteria. Section 8.1.5 provides emissions from the combustion turbines and the cooling tower. Staff needs additional information in order to adequately assess the impact on public health from these two sources of emissions. Additionally, Section 8.6.5 Mitigation Measures refers to the development of a PM10 mitigation/community benefits package. This PM10 mitigation/community benefits package is discussed in section 4.4. Staff needs additional information regarding this program in order to fully evaluate the claim as stated in Section 8.6.5 that mitigation measures will result in the SFERP providing “net benefits to public health in Southeast San Francisco.”

DATA REQUEST

42. Please provide in tabular format the excess lifetime cancer risk and acute and chronic hazard indices at the fence line, the point of maximum impact, the nearest residence, the nearest sensitive receptor, and the nearest workplace. Please delineate risk and hazard from the two emission sources and the total risk.
43. Please clarify if any emergency diesel generators will be used for any purpose on-site (e.g. “black start”; fire water), and if so, please include the emissions and risks/hazards in your response to DR-1 above.
44. The first two columns of the second table of Table 8.1C-1 list emission rates for Modeling in units of g/sec for 1-hour and annual emissions, per CTG. The third and fourth columns of that table list Modeled Impacts in $\mu\text{g}/\text{m}^3$ for the three CTGs combined. In the Health Risk Assessment conducted by Sierra Research, the values from columns three and four are used as the g/sec emission rate. This appears to be a mistake in units (g/sec or $\mu\text{g}/\text{m}^3$). Please clarify which units were used in the modeling (emission rate in g/sec or concentration in $\mu\text{g}/\text{m}^3$).
45. Please provide UTM coordinates for the following receptors for all emissions scenarios from the CTGs, cooling towers, and diesel construction equipment: fence line, MEI, nearest residence, nearest sensitive receptor, and nearest workplace.
46. Please provide emission rates for toxic air pollutants from diesel exhaust emissions during the construction phase.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

47. Please provide a more detailed description of the Particulate Matter (PM) Mitigation and Community Benefits Package including the following:
- a) A detailed description of the monitoring stations located at Whitney Young Circle, Dog Patch, and Potrero Hills in San Francisco.
 - b) The rationale for location selection.
 - c) The frequency of sampling, toxic air contributors (TACs) to be sampled (VOCs and semi-volatile compounds), quality assessment/quality control (QA/QC), and methods of reporting to the CEC Compliance Project Manager and the community.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Soil and Water Resources

Author: Antonio Mediati

BACKGROUND

The City of San Francisco (City) will provide process water to the SFERP through a new water pumping station (WPS). The water will be treated. The process water for the water treatment plant at the SFERP site will come from the City's combined sewer system at a collection station near Marin Street. The WPS will include infrastructure to remove floatable matter and large debris prior to discharge into the process water pipeline. Excess flow and debris will be returned to the combined sewer system. Water for the SFERP for process and cooling water, equipment wash water and the dual plumbing system (toilets) would be recycled water produced by the new water treatment system on the project site. A new pipeline will be installed along Marin, Mississippi, Cesar Chavez, Tennessee, and 23rd Streets to convey the process water to the new onsite water treatment system. The onsite treatment system will be designed to produce Title 22-quality recycled water, with the treatment system providing primary, secondary, and tertiary treatment plus disinfection either by ultraviolet system or chlorination.

Potable water will be supplied to SFERP to meet minor potable water needs, fire protection demands, and emergency cooling and process backup supplies. The potable water source is the City's potable water distribution system. An existing potable water pipeline of sufficient capacity is located at the corner of Illinois Street and 23rd Street, which will supply water to the SFERP.

Plant wastewater and reject water from the SFERP's water treatment system will be discharged into the City's combined sewer system, which routes the waste to the Southeast Water Pollution Control Plant (SEWPCP).

DATA REQUEST

48. Please provide the information required by Article 22A of the San Francisco Health Code.
49. Please describe the WPS to be constructed.
50. Does the applicant intend to obtain a Class I discharge permit from the City. If so, please provide a schedule.
51. Please provide "will-serve" letters for the potable water, process water, and waste discharge (power plant the wastewater treatment plant and construction dewatering).

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

The Power plant and pipeline construction will result in ground disturbance. These activities expose soil to wind and water erosion. They may also require dewatering activities.

DATA REQUEST

52. Please provide a draft erosion and sediment control plan for the entire project (project site, laydown area, pipelines, etc).
53. Please provide the estimate of soil loss with BMPs and mitigations in place. List the BMPs to be employed and estimate the effectiveness of each.
54. Please provide a draft of the environmental mitigation plan referenced in section 7.4.
55. Please provide any information available on past flooding to the project site and the local area.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Traffic and Transportation

Author: Ken Peterson

BACKGROUND

Table 8.10-2 uses 1999 and 2002 sources for traffic data. We are concerned that the 1999 data may have become obsolete during the last five years of development in southeast San Francisco.

DATA REQUEST

56. Please submit 2003 sources for Table 8.10-2 and Figures 8.10-3 through 8.10-6.
57. Please explain any need to use earlier sources.
58. Please identify the sources for Figures 8.10-3 through 8.10-6.

BACKGROUND

Section 8.10.4, Cumulative Impacts may not be complete in terms of reflecting all reasonably foreseeable projects in the SFERP vicinity. This section states that Segment C of the 16th Street to 23rd Street Light Rail extension would be near completion at the time of SFERP's peak construction months, and so there would be no significant construction timing issues relating to peak hour construction trips. Additionally, the cumulative impacts discussion does not include the following proposed projects:

- 71-unit residential units and retail project at 1275/1301 Indiana Street.
- 141 residential unit and retail project at 2235 3rd Street.

DATA REQUEST

59. Given the possibility of construction delays for any large project, please submit an analysis of cumulative traffic impact if the construction of the above-noted Light Rail extension were to coincide with SFERP's peak construction months.
60. Please submit an analysis of cumulative traffic impact for the proposed 1275/1301 Indiana Street project.

BACKGROUND

The intersection of 23rd Street and 3rd Street is part of the construction traffic route, but is not included in tables and narrative regarding existing and future LOS levels.

DATA REQUEST

61. Please submit revised Tables 8.10-4 and 8.10-6 with inclusion of the intersection of 23rd Street and 3rd Street and revised narrative as necessary.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

BACKGROUND

Page 8.10-12 (revised 4/8/04) refers to a freeway mainline level of service analysis, but does not refer to an author or source for this analysis.

DATA REQUEST

62. Please submit a reference for the freeway mainline level of service analysis referred to on page 8.10-12 (revised 4/8/04).

BACKGROUND

The roadway segments that are part of the water supply pipeline route include Marin and Tennessee Streets, but the AFC does not include current traffic information for these streets, or an analysis of pipeline construction impact on any streets included in the pipe route.

DATA REQUEST

63. Please include traffic information for the segments of Marin and Tennessee Streets that are part of the water supply pipeline route.
64. Please provide a traffic analysis of pipeline construction impact on streets included in the pipe route.

BACKGROUND

The AFC does not include the volume design capacity of roadways to be used by construction trucks and workers.

DATA REQUEST

65. Please describe the volume design capacity of roadways listed in Table 8.10-2.

BACKGROUND

The percentage of current traffic flows for passenger vehicles versus trucks for the portion of 23rd Street that is part of the construction truck route is not included in the AFC.

DATA REQUEST

66. Please provide the percentage of current traffic flows for passenger vehicles versus trucks for the portion of 23rd Street that is part of the construction truck route.

BACKGROUND

Inbound and outbound truck routes are described for hazardous materials transport, but not for construction equipment, materials, and waste transport.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

DATA REQUEST

67. Please submit a description of construction truck traffic routes.

BACKGROUND

The west exit off-ramp for Cesar Chavez Avenue from the US 280 highway may be a safety consideration for project construction and operations delivery trucks due to this ramp's steep curve.

DATA REQUEST

68. Please analyze the danger to truck traffic that could be caused by the curve of the Cesar Chavez Avenue west off-ramp from the US 280 highway and describe any necessary mitigation.

BACKGROUND

Because there are housing developments near the project truck route, it is necessary to assess project impact on school bus routes.

DATA REQUEST

69. Please work with San Francisco School District transportation staff on the Commission staff's May 18, 2004 request for a phone conference to discuss school bus route issues.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Transmission System Engineering

Author: Mark Hesters

BACKGROUND

Staff needs to identify facilities required for termination of the project and all “downstream” transmission facilities required by the interconnection of the project. The System Impact Study provided in the AFC studied the project at 209 MW and the proposed project will only produce 151.5 MW. The letter included in the AFC supplement from the California Independent System Operator (Cal-ISO) indicated PG&E will be completing a Facilities Cost Report with the plant output updated to the 151.5 MW.

DATA REQUEST

70. Provide the Facilities Study Report completed by PG&E for any interconnection for which you are seeking certification. The study or studies should, at a minimum, demonstrate conformance or non-conformance with NERC/WECC, Cal-ISO and utility reliability and planning criteria with the following provisions:
71. Identify major assumptions in the base cases including imports and exports to the system, major generation including hydro, load changes in the system and queue generation.
72. Analyze system for Power Flow for N-0, important N-1 and critical N-2 contingency conditions, and provide a list of pre and post project overload criteria violations.
73. Analyze system for Transient Stability and Post-transient voltage conditions under critical N-1 and N-2 contingencies, and provide related plots, switching data and a list of voltage criteria violations.
74. Provide a Short Circuit Study Report showing fault currents at important substation buses with and without the new generation and respective breaker interrupting ratings in a table side by side.
75. Identify the reliability and planning criteria utilized to determine the criteria violations.
76. Provide a list of contingencies evaluated for each study.
77. List mitigation measures considered and those selected for all criteria violations.
78. Provide power flow diagrams (MW, % loading & P. U. voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations occur.
79. Provide electronic copies of *.sav and *.drw GE PSLF and EPCL contingency and comparison files (if available).

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

TECHNICAL AREA: Visual Resources

AUTHOR: Mark R. Hamblin and William Walters

BACKGROUND

The proposed project requires the demolition of the former Station A turbine building (105 feet in height approx.) and two other buildings currently on the site. These buildings currently block light originating from the operating Potrero Power Plant (e.g., lighting from the Unit 3 structure [125 feet height] and stack [305 feet height]) that may become visible to the Potrero Hill neighborhood with the new project. The elevated perspective of this neighborhood facilitates visual access to the proposed project site.

DATA REQUEST

80. Please describe the extent to which nighttime lighting originating from the existing Potrero Power Plant would become visible to the Potrero Hill neighborhood with the operation of the proposed project.
81. Please describe existing off-site night lighting in the immediate vicinity of the project site that is visible to the Potrero Hill neighborhood.

BACKGROUND

AFC page 4-4 states “the City consulted extensively about the SFERP with community members and hosted several public meetings to introduce and discuss the project. Input from these meetings and from Supervisor Maxwell, who represents the Potrero, Hunters Point and Dogpatch neighborhoods, provided the basis for certain features of the SFERP designed to reduce impacts on the community.”

DATA REQUEST

82. Please explain any visual sensitive area(s) and visual concern(s) that were made known to you by community members regarding the proposed project.

BACKGROUND

Location number 5 on Figure 8.4-4 in the AFC visual section identifies a proposed or recently approved housing project. The Figure 8.4-4 legend identifies this location in the 1300 block of Illinois Street. A housing project at this location would be approximately 450 feet from the proposed project site.

DATA REQUEST

83. Please explain the status of the housing project at this location.

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BACKGROUND

Location number 3 on Figure 8.4-4 in the AFC visual section identifies a proposed or recently approved housing project. The Figure 8.4-4 legend identifies this location in the 3000 block of 3rd Street. A housing project at this location would be approximately 1300 feet from the proposed construction laydown area for the project.

DATA REQUEST

84. Please explain the status of the housing project at this location.

BACKGROUND

Staff plans to perform a plume frequency modeling analysis for the cooling tower. Staff will require additional project data to complete this analysis.

DATA REQUEST

85. Please summarize for the cooling tower the conditions that affect vapor plume formation including cooling tower heat rejection, exhaust temperature, and exhaust mass flow rate. Please provide values to complete the table and additional data as necessary for staff to be able to determine how the heat rejection load varies with ambient conditions and also determine at what ambient conditions only one cell will be in operation.

Parameter	Cooling Tower Exhausts		
Number of Cells	2 cells		
Cell Height*	12.76 meters (~41.9 feet)		
Cell Diameter*	3.96 meters (13 feet)		
Tower Housing Length*	15.24 meters (50 feet)		
Tower Housing Width*	4.27 meters (14 feet)		
Ambient Temperature*	36°F	59°F	80°F
Ambient Relative Humidity			
Number of Cells in Operation			
Heat Rejection (MW/hr)			
Exhaust Temperature (°F)			
Exhaust Flow Rate (lb/hr)			

*Stack dimensions from AFC Appendix 8.1B Table 8.1B-4. Tower length and width are from AFC Appendix 8.1B Table 8.1B-1. Example ambient temperatures are from turbine operating case data shown in Appendix 8.1A Table 8.1A-1.

86. Additional combinations of temperature and relative humidity or curves showing heat rejection vs. ambient condition, if provided by the applicant, will be used to more accurately represent the cooling tower exhaust conditions. Please include

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appropriate design safety margins for the heat rejection, exhaust flow rate and exhaust temperature.

87. Please provide the cooling tower manufacturer and model number information and a fogging frequency curve from the cooling tower vendor, if available.

**San Francisco Electric Reliability Project
Data Requests
(04-AFC-1)**

Technical Area: Waste Management

Author: Alvin Greenberg, Ph.D.

Technical Senior: Mike Ringer

BACKGROUND

More information is necessary regarding available waste disposal facilities in order to assess potential waste-related impacts from SFERP.

DATA REQUEST

88. Regarding the City's exclusive contract with the Altamont landfill, does the City have the right to use other landfills for Class II and III waste disposal?
89. Please clarify which of the disposal facilities identified in AFC Table 8.13-4 the City plans to use once the contract with the Altamont Landfill expires in approximately 2010.
90. Please provide the total weight (in tons per year) and volume (in cubic yards per year) of hazardous waste that will be generated during operations of the SFERP (listed in AFC Table 8.13-3), and please discuss whether or not there will be existing treatment and or disposal facilities that will be able to handle these wastes beyond the year 2021 (when Clean Harbors' Buttonwillow Landfill is scheduled for closure).

BACKGROUND

Staff needs additional information in order to assess impacts from soil excavation during construction of the proposed SFERP.

DATA REQUEST

91. Please provide a copy of the Phase II ESA for the Potrero site conducted by Fluor Daniel-GTI (FD-GTI 1998) and the addendum (FD-GTI 1998).