2.17 MANDATORY FINDINGS OF SIGNIFICANCE

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐
c) Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

MANDATORY FINDINGS OF SIGNIFICANCE DISCUSSION

The proposed project consists of the construction of an underground 115 kV cable line from the Potrero Switchyard to the Hunters Point Switchyard in the city of San Francisco.

CHECKLIST IMPACT CONCLUSIONS

a) As described in Section 2.1, *Aesthetics*, the proposed project would not have the potential to result in potentially significant unavoidable impacts related to the visual quality of the area.

As described in Section 2.3, *Air Quality*, the proposed project would have the potential to result in several potentially significant impacts primarily related to short-term construction related air emissions which have some potential to degrade the quality of the environment. Mitigation measures contained in each of the subject resource area descriptions are considered adequate to reduce these individual impacts to a less than significant level.

As described in the Section 2.4, *Biological Resources*, the project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species population to drop below self sustaining levels, nor would it restrict the

range of a rare or endangered plant or animal community, or reduce the range of a rare or endangered plant or animal.

Section 2.5, *Cultural Resources*, concludes that the proposed project would have some potential to eliminate important examples of the major periods of California history or pre-history. No direct impacts to known cultural resources would occur during project construction. There are no known areas of cultural significance located within the proposed project area. The closest site is CA-SFr-15, a Nelson shellmound site, located one-quarter mile southwest of the proposed project site. Unknown cultural resources, however, could be exposed during trench excavation activities. An on-site monitor would be present during all excavation activities and a specific protocol has been established to deal with undiscovered resources. As a result, no impact to cultural resources is anticipated with implementation of mitigation measures identified in this MND.

b) The proposed project impacts include the potential for an accidental release of hazardous materials stored in staging areas and used during the construction of the proposed project that could enter nearby waterways, adjacent lands, or public roadways. There is the potential for exposure to contaminated soil and groundwater from existing and unidentified contamination that might be encountered during excavation and/or dewatering activities. With the mitigation measures provided in Section 2.7, *Hazards and Hazardous Materials*, the proposed project would not have environmental effects that could cause adverse effects on human beings, either directly or indirectly.

Electricity transmission or use can generate EMF's, which are caused by the presence and motion of electric charges. Over the past several years, media reports on potential EMF exposure from power lines have generated much public interest and concern. Mitigation measures, including the incorporation of EMF reduction measures in accordance with CPUC Decision 93-11-013 and Decision 39112-15 for the Jefferson-Martin 230 kV Transmission project are included in Section 2.7, *Hazards and Hazardous Materials.* As a result, the impacts would be less than significant.

Additionally, the proposed project would provide necessary internal transmission network reinforcements to the electrical transmission system serving the City in order to improve reliability, increase capacity, and provide a component needed to meet the goal of closing PG&E's Hunters Point Power Plant.

c) CEQA Guidelines Section 15130(a) requires a discussion of the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. The CEQA Guidelines note that the cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of project-only impacts and should be guided by the standards of practicality and reasonableness.

In addition, CEQA Guidelines Section 15130(b) states that the following three elements are necessary for an adequate cumulative analysis:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Lead Agency (i.e., the list approach); or a summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions (i.e., the plan approach). This information is provided in **Tables 2.17-1** and **2-17.2** at the end of this section.

- A summary of expected environmental effects to be produced by those projects. The summary must include specific reference to additional information that states where that information is available. This information is provided in **Tables 2.17-1** and **2-17.2**.

- A reasonable analysis of the cumulative impacts of the relevant projects and an examination of reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project.

The cumulative projects considered in this analysis are provided in **Tables 2.17-1** and **2.17-2**. These projects fall into two categories: construction projects in the vicinity of the proposed project (approximately 1/2 mile) are identified in **Table 2.17-1**; and generation and transmission projects located within the Greater Bay Area, identified in **Table 2.17-2**. The construction projects range from residential and commercial developments, light rail and inter-modal facilities, to other utility projects. These projects are examined in light of their potential to contribute to short-term, construction-related effects in conjunction with the proposed project. Planned and proposed generation and transmission projects were identified using information from SFPUC, CAISO, and PG&E. These projects are not confined to the immediate vicinity of the proposed project and mainly consist of improvements to the electrical transmission network serving San Francisco. While some of these transmission projects may contribute to short-term construction-related effects, they are also examined for their possible contribution to long-term operational effects.

LOCAL CONSTRUCTION PROJECTS

PG&E states that it anticipates construction of the proposed project to begin on or before April 1, 2005 and extend through a nine-month period (Essex Environmental, 2003). PG&E evaluated projects within a half mile area on either side of the proposed project route. These projects have been brought forth through applications or pre-application meetings. Additional analysis was conducted by ESA to evaluate all applicable projects within the vicinity of the proposed project route. It is reasonable to assume that construction of a number of these projects may coincide with the proposed project. **Table 2.17-2**, which list development, utility improvement, and capital investment projects, was developed by contacting the following entities for information on projects within their jurisdictional purview:

- City and Count of San Francisco, Department of Public Works
- City and County of San Francisco, Planning Department
- San Francisco Municipal Railway
- San Francisco Public Utilities Commission
- Port of San Francisco

GENERATION AND TRANSMISSION CUMULATIVE PROJECTS

As shown on **Table 2.17-2**, other power generation and transmission projects are planned for the Greater Bay Area as part of a long-term initiative to meet growing power needs and increase reliability (SFPUC, 2002).

Currently, both of the in-City power plants are located in the southeast sector. To address this environmental justice issue, in July 1998, the City and County of San Francisco entered into an agreement with PG&E to "permanently shut down the Hunters Point Power Plant as soon as the facility is no longer needed to sustain electric reliability in San Francisco and the surrounding area and the Federal Energy Regulatory Commission (FERC) has authorized PG&E to terminate PG&E's Reliability Must Run (RMR) Contract for the facility" (CPUC, 2004).

In September 2004, CAISO created an action plan that meets reliability standard and allows for the release of the Hunters Point Power Plant from its RMR agreements. In order to release Hunters Point existing generation Units #1 and #4 from their RMR Agreements, seven projects are required, including: San Mateo-Martin # 4 Line 60-115 kV Voltage Conversion; Ravenswood #2 230/115 kV transformer project; San Francisco Internal Cable Higher Emergency Ratings; Tesla-Newark #2 230 kV Line Reconductoring; Ravenswood-Ames #1 and #2 115 kV Lines Reinforcement; San Mateo 230 kV Bus Insulator Replacement; *Potrero to Hunters Point 115 kV Cable*; Potrero #3 retrofit with emission control technology; and the Jefferson-Martin 230 kV Line. To release Hunters Point Units #2 and #3, which operate as synchronous condensers to produce voltage support and are not in electric energy production mode, from the RMR Agreements, a Static Var Compensator (SVC) located at Potrero Substation would be required to both replace these synchronous condensers as well as support reactive capacity lost when Hunters Point Unit #4 is eventually retired. **Table 2.17-2** provides the status of the above-mentioned projects identified by CAISO as necessary for the closure of Hunters Point Power Plant.

There are two planned transmission projects that can help alleviate San Francisco's meet growth demand and capacity shortage issues. A planned upgrade to the San Mateo-Martin #4 60 kV to 115kV line, which currently serves San Francisco and was energized in July 2004, is expected to bring as much as 100 megawatts (MW) of new capacity. Additionally, the proposed Jefferson-Martin transmission line is planned for completion in the fall of 2005 and would add up to 350 MW of new capacity. However, approvals for right-of-way through several Peninsula communities may cause significant delays. While the implementation of both of these transmission projects would facilitate the closure of

Hunters Point, any problems in the development of the Jefferson –Martin project would delay the closure (SFPUC, 2002).

CONSTRUCTION-RELATED EFFECTS (SHORT-TERM)

In conjunction with the proposed project, several short-term construction-related cumulative impacts may occur. These potential impacts include impacts to cultural resources, hazardous materials, noise, and traffic. Each is described in detail below.

- Implementation of the proposed project, as described in Section 2.5, *Cultural Resources*, would have the potential to result in the disturbance of undiscovered cultural resources. In conjunction with the other local construction projects in **Table 2.17-1** and the underground transmission projects identified in **Table 2.17-2** (such as the Jefferson-Martin and Martin-Hunters Point transmission lines), it is possible that the proposed project could contribute to a significant cumulative impact. It is unlikely, however, that the trenching associated with the proposed project would uncover a major cultural find, especially in previously disturbed areas. Nonetheless, a full-time on-site monitor would be present during construction, to address unanticipated discoveries, pursuant to CEQA Guidelines Section 15064.5(e) and (f). It is probable that all other cumulative projects (particularly underground transmission projects) would have similar requirements. Additionally, resources are protected by the State Historic Preservation Officer in accordance with the National Historic Preservation Act. Due to these factors, cumulative impacts associated with the project are determined to be less than significant.

- As described in Section 2.7, *Hazards and Hazardous Materials*, a number of potential hazardous sites have been identified along the proposed project route through research of existing regulatory lists of these sites. Other construction projects in the area also have the potential to be effected by hazardous sites in the area. The proposed project, in conjunction with the cumulative project scenario, could result in significant cumulative impacts if adequate mitigation is not required for each project. Excavated and stored material could contain hazardous waste that could present risks to construction workers, the public, or the environment if not handled according to specific protocols. The mitigation measures are outlined in Section 2.7, *Hazards and Hazardous Materials*, in addition to the codified requirements of state and federal law. With the implementation of the mitigations and safety protocols for this project, as well as others in the cumulative scenario, impacts are determined to be less than significant.

- Equipment used during construction of the proposed project would temporarily increase short-term noise levels in the project area. The proposed project, in conjunction with the other projects listed on **Table 2.17-1** would have the potential to contribute to a cumulative impact of noise levels in the project area. Mitigation measures specified in Section 2.11, *Noise*, would reduce the significant noise effects associated with the proposed project to a level of less than significant. Since it is unlikely that all activities would occur in the same area at one time, noise increases would be dispersed and a significant cumulative noise impact would not occur.

- Traffic flow in the project area would be disrupted by the proposed project during construction. Street, lane, and sidewalk closures may be required. In conjunction with other construction on projects in the area, potential cumulative impacts could occur. As specified in Section 2.15, *Traffic and Transportation*, PG&E has committed to the preparation of a Traffic Management Plan prior to construction. This plan is subject to the approval of the City of San Francisco. Other cumulative projects would be required to adhere to the requirements set forth in the City of San Francisco Excavation and Special Traffic Permits, leading to a determination that significant cumulative impacts would not occur.

OPERATIONAL EFFECTS (LONG-TERM)

In conjunction with the proposed project, long-term operation-related cumulative impacts may occur. The potential cumulative impacts are described in detail below.

- As described in Section 2.7, *Hazards and Hazardous Materials*, operation of the new 115 kV cable line would expose people to EMF, which has been a source of public concern. In conjunction with the other generation and transmission projects identified in **Table 2.17-2**, it is possible that the project could contribute to a potentially significant cumulative impact. In accordance with CPUC Decision 93-11-013, the proposed project shall incorporate EMF reduction measures described in **Mitigation Measure HAZ-2**. Other generation and transmission projects will be required to comply with CPUC Decision 93-11-013. With the implementation of the proposed mitigation and compliance with CPUC Decision 93-11-013, the cumulative impacts are determined to be less than significant.

- Operational noise (long-term increases in the ambient noise level) associated with the proposed project is determined to be less than significant. Likewise, other transmission projects and switchyard improvements identified in **Table 2.17-2** are unlikely to increase the ambient noise level in the vicinity of this project. The cumulative impact of long-term noise levels is therefore determined to be less than significant.

- Impacts related to geology (Section 2.6) would be site-specific and would be reduced to a less than significant level with the implementation of proposed mitigation. Other projects considered in the cumulative scenario, by employing standard engineering practices and California Building Code (CBC) standards, would not likely increase the risk associated with geologic hazards. The cumulative impact would be less than significant.

- The placement of the transmission line and backfill material could impede the flow of groundwater, as described in Section 2.8, *Hydrology and Water Quality*. Implementation of the proposed mitigation would reduce this impact to less than significant. Other transmission projects, if located below the water table, would likely have similar requirements. These factors lead to a determination that cumulative impacts associated with the project are less than significant.

TABLE 2.17-1
PLANNED AND PROPOSED LOCAL CONSTRUCTION PROJECTS WITHIN 1/2 MILE OF THE PROJECT AREA

Project	Address/Location	Description	Size (Acres)	Status [1]	Anticipated Construction Schedule	
					Begin	End
City and County of San Francisco, Public Works Department						
Street Construction Coordination Center 5 Year Plan Projects	Various Locations	Paving, sewer, and various street improvements projects by the San Francisco Water Department, Underground Planning Department, Department of Parking and Traffic, and SBC repairs.	N/A [2]	A	September 2004	July 2005
San Francisco Municipal Railroad						
Third Street Light Rail Project	Third Street from Visitacion Valley to Chinatown	Two-Phase project to construct 7.1 miles of new light rail, 20 surface stations, and 4 subway stations.	N/A	U	2001	Phase I: Spring 2005 Phase 2: INA
Metro East Light Rail Maintenance and Operations Facility	Parcel bounded by 25th, Illinois Cesar Chavez, and Maryland Streets	Construction of facility for storage, maintenance, and operation of light rail vehicles. Will consist of construction of an initial 13-acre site that will be expanded.	17	A	Spring 2004	2007
Islais Creek Busyard ("Lighter Than Air" facility)	Indiana Street and I-280	Construction of a maintenance and storage yard for buses	INA	P	2006	INA

TABLE 2.17-1 (continued)
PLANNED AND PROPOSED LOCAL CONSTRUCTION PROJECTS WITHIN 1/2 MILE OF THE PROJECT AREA

Project	Address/Location	Description	Size (Acres)	Status [1]	Anticipated Construction Schedule	
					Begin	End
Port of San Francisco						
Illinois Street Intermodal Bridge	Illinois Street across Islais Creek Channel (between Marin Street and Amador Street)	Construction of an intermodal bridge that will connect the Port's northern container terminal (Pier 80) on the northern bank of Islais Creek with the southern container terminals (Pier 90 through 92, Pier 94 through 96, and Backlands). Reconfiguration of railroads tracks on Cargo Way to accommodate increase rail traffic in conjunction with the intermodal bridge.	N/A	A	Sept. 2004	Dec. 2005
Pacific Cement	Amador Street near Pier 94	Construction of a fully enclosed concrete batch plant.	4.5	U	June 2004	June 2005
RMC Pacific Materials	Pier 90	Construction of a ready-mix concrete plant, maintenance shop, parking, and truck wash stations. This facility will replace the one located at Third and Mariposa Streets.	4.5	U	Sept. 2004	Sept. 2005
San Francisco Petroleum	Pier 80 or 90	Construction of marine fueling facility with possibility for City truck and vehicle fueling.	0.5	PL	INA	INA
Pier 70 Development	Maritime Reserve East of Illinois Street between 18th and 21st Streets	Development of new maritime, maritime support, and general industry uses totaling 400,000 square feet within the 55-acre reserve. Development of a 16-acre site for commercial office and/or research and development space, retail space, and public access and recreational maritime uses totaling 950,000 square feet.	9.2	PL	INA	INA

Project	Address/Location	Description	Size (Acres)	Status [1]	Anticipated Construction Schedule	
					Begin	End
Port of San Francisco						
Pier 90–94 Backlands Development	Northeast of Cargo Way	Development of 800,000 to 1,000,000 square feet of light industrial/warehouse uses within the backlands. An RFP to developers is expected in 2005.	47	PL	INA	INA
Specialty Crushing	Pier 94 at Cargo Way	Concrete recycling. Lease renewed for five years. May add concrete batch plant onsite.	10	PL	INA	INA
City and County of San Francisco, Planning Department						
Residential development	Various locations	Miscellaneous one- to four-story buildings with one or two residential dwelling units.	INA	INA	INA	INA
Residential Building	25 Sierra Street	Four-story, 67-unit residential building with office and retail space.	INA	INA	INA	INA
Retail Building (Home Depot)	491 Bayshore Boulevard	Demolish two existing retail buildings and erect new two-story building and three story parking structure for retail and material sales.	5.7	P	INA	INA
Retail/Office Building	1000 17th Street	Four-story retail/office building	INA	INA	INA	INA
Mixed-Use Development	3rd Street/Cargo Way	Mixed Use Residential/commercial redevelopment project	INA	PL	INA	INA

1 Status encompasses the following categories:
U = The project is under construction.
A = The local authority or lead agency has formally approved the project.
P = The project is pending in the formal application review process.
PL = The project is planned; proponents have not initiated the formal approval process.
INA = Information is not available.

2 Not applicable (N/A)

TABLE 2.17-2
PLANNED AND PROPOSED GENERATION AND TRANSMISSION PROJECTS IN THE SAN FRANCISCO BAY AREA

Project	Address/Location	Description	Completion Date
Jefferson-Martin 230-kV Line Project	San Mateo County	A new 27-mile 230-kV transmission line between Jefferson and Martin 230-kV substations. The cable would be partly or wholly underground.	December 2005 to March 2006
Jefferson 230/60-kV Transformer	Jefferson Substation	Installation of a second 230/60-kV transformer at Jefferson Substation.	December 2005
Martin-Hunters Point 115-kV Underground Cable	Hunters Point	Construct a new 115-kV underground cable between Martin and Hunters Point with an ampacity rating of 1,000 amps; this cable is required to distribute power imported into the Martin substation in place of power generated at the Hunters Point Power Plant.	Summer 2007
Potrero Static VAR Compensator	Potrero Switchyard	Installation of +240/-100 Static Var Compensator at the Potrero Switchyard	Under Construction
Tesla-Newark #2 230-kV Line 2nd Reconditioning	8 miles out from the Tesla Substation	Complete bundling of the Tesla-Newark #2 230-kV line with 954 ACSS conductor for approximately 8 miles out from the Tesla substation	Under Construction, May 2005
Ravenswood 230/115-kV Transformer	East Palo Alto	Installation of a second 230/115-kV transformer at Ravenswood	Completed April 2003
Ravenswood-Ames #1 and #2 115-kV Lines Reinforcement	East Palo Alto	Increase the rating of the Ravenswood Ames #1 and #2 115-kV lines by reconductoring them with 477 ACSS conductor	Planning Phase, May 2005
San Mateo-Martin #4 Line 60-115-kV Voltage Conversion	San Mateo County	Reconductor and convert the San Mateo-Martin 60 kV circuit to 115-kV operation. Substation modifications also needed at Burlingame and Millbrae.	Completed
City of Santa Clara – PG&E 230-kV Interconnection	Santa Clara County	Interconnection of Silicon Valley Power's proposed 230-kV line from its Northern Receiving station to Los Esteros substation	Under evaluation
Potrero 3 SCR retrofit	Potrero Power Plant	Retrofit Potrero #3 with emission control technology	February 2005

TABLE 2.17-2 (continued)
PLANNED AND PROPOSED GENERATION AND TRANSMISSION PROJECTS IN THE SAN FRANCISCO BAY AREA

Project	Address/Location	Description	Completion Date
San Francisco Internal Cable Higher Emergency Ratings	San Francisco	Upgrade of cable rating in San Francisco	Completed
San Mateo 230 kV Bus Insulator Replacement	San Mateo County	Eliminate bus wash at San Mateo 230 kV. Bus will reduce the 400 MV generator operational requirement to less than 200 MW.	May 2005
San Francisco Electric Reliability Project and San Francisco Airport Electric Reliability Plant	San Francisco and San Mateo Counties	The transmission lines running up the peninsula to San Francisco cannot carry enough electricity to serve the city's peak load. To remedy the situation, the City has acquired four low-emission combustion turbines. These will maintain reliable electrical service by providing power close to where it is needed, as well as ensuring the closure of the city's oldest power plant at Hunters Point.	December 2006
Upgrade the Newark-Dumbarton 115 kV Line	San Mateo and Alameda Counties	Upgrade of transmission line connecting the Newark and Dumbarton Substations	May 2006
Upgrade the Bair-Belmont 115 kV Line	San Mateo County	Upgrade of transmission line connecting the Blair and Belmont Substations	Under evaluation, scheduled for 2007
Upgrade the Metcalf-Hicks and Metcalf-Vasona 230 kV Lines	San Mateo and Santa Clara Counties	Upgrade of transmission line connecting the Metcalf -Hicks - Vasona- Substations	Under evaluation, scheduled for 2007
Add Voltage Support at Ravenswood Substation	Palo Alto	Upgrade to add additional voltage to Ravenswood Substation	Under evaluation, scheduled for 2007

REFERENCES – Mandatory Findings of Significance

CAISO, 2004. *San Francisco Long-Term Transmission Planning Study Phase 2 Study Plan*. April 2004.

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