SECTION 2
PROJECT DESCRIPTION

PROJECT CHARACTERISTICS

Pacific Gas and Electric Company's (PG&E's) application (Application No. 96-11-020) seeks authority from the California Public Utilities Commission (CPUC) to sell three of its eight fossil-fueled generating facilities through a competitive auction process. The CPUC has approval authority over the general terms of the Purchase and Sale Agreement, the Operation and Maintenance Agreement, and the Bidding Contract of each proposed sale. The Application is being considered by the CPUC in three phases (1A, 1B, and 2). In Phase 1A, the CPUC will issue an interim decision confirming whether:

(a) PG&E's proposed sales are in the public interest and these plants would no longer be necessary and useful in PG&E's performance and duties to the public;

(b) the proposed sale process, including the general terms of the proposed contracts, is acceptable;

(c) the fair market value for the generating plants will be the price resulting from the sale process; and

(d) PG&E's proposed accounting and ratemaking treatment for the sales, including the forecast cost of environmental remediation, will be adopted.

Per a March 19, 1997 ruling by an Administrative Law Judge (ALJ), a second interim decision, Phase 1B, will determine if the Operations and Maintenance (O&M) Agreement is reasonable to both PG&E and the buyer and whether the "must run" contracts are adequate. This will address Public Utility Code Section 362 and will determine whether the proposed Independent System Operator (ISO) "on-call" contracts will ensure reliability.

If these issues are resolved in the affirmative, then PG&E may proceed with an auction process to secure firm bids for the plants.

At Phase 2, the CPUC will consider the environmental impacts of PG&E's proposed sales and decide whether to issue a final decision that would:

(a) approve the terms and price of each sale; and

(b) approve PG&E's accounting and ratemaking adjustments based on the pre-approved methodology and the actual proceeds and terms of the sale.

Final CPUC approval and a fully operating Power Exchange (PX) are conditions to closing each sale.

The facilities proposed to be divested include the following: Morro Bay Power Plant, Moss Landing Power Plant, and Oakland Power Plant. The locations of these power plants are shown in Figure 2.1. By selling these three plants, PG&E would divest itself of 2,645 megawatts (MW) of generating capacity, about 42% of the utility's total fossil-fuel generating capacity. All of PG&E's plants are relatively old, and typically operate as "swing units" used to meet changing loads and peak demand conditions. The steam units are typically operated such that they have small capacity factors. Combustion turbines, which serve as peaking units, have even smaller capacity factors.

As summarized in PG&E's Proponent's Environmental Assessment (PEA), PG&E's Section 851 Application seeks authority to sell its three power plants on the following terms and conditions:

1. The three plants would be offered for sale through a competitive bidding process to buyers who are qualified to ensure the plants operate when needed for system reliability and, when no longer needed, to decommission them in a responsible manner. Qualified entities would be permitted to bid on and purchase more than one facility.

2. All generating and retired units at a site would be sold to the same buyer, along with equipment and land necessary to the generation function. Related facilities at some of the power plant sites (such as tank farms and marine terminals) are included in the sale, as shown in Figures 2.3, 2.4, 2.6, and 2.9.

3. PG&E plans to retain ownership and control of the switchyards and any transmission-related facilities. PG&E plans to sell the land under the switchyards and retain easements for the equipment and PG&E's access to the equipment.

4. PG&E would identify and retain liabilities associated with existing environmental contamination, off-site disposal and ongoing operations of the switchyards. To control the potential costs associated with these liabilities, the proposed purchase agreement gives PG&E the right to conduct post-sale remediation. The buyer would be required to indemnify PG&E against liabilities arising from the buyers' post-sale activities.

5. The buyers for Moss Landing and Oakland would be required to enter into a suitable contract with the ISO to prevent price manipulation during times when the plant is required to operate due to local transmission constraints, i.e., when the plant is "must-run."

6. PG&E would operate the plants on behalf of the new owner pursuant to an Operations and Maintenance Agreement (O&M Agreement) that would have a term of at least two years after the sale closes, if the new owner plans to operate the units in their current configuration.

INSERT FIGURE 2.1: LOCATION OF PG&E POWER PLANTS (IN GRAPHICS)

The sale of these power plants would include transfer of permits necessary for the operation of each plant (e.g., air and water permits). Separate ownership and control of the transmission lines is not expected to affect the operational flexibility of the power plants. The purchasers will have the right, in the absence of must-run contracts, to dispose of the facilities at their discretion subject to all applicable laws and regulations and any potential limitations in the CPUC approved sale contract.

PROJECT PURPOSE AND NEED

As contained in PG&E's Proponent's Environmental Assessment (PEA), the following is PG&E's stated purpose and need for this project:

> "In its December 20, 1995, Policy Decision the Commission requested that California's two largest investor-owned utilities (IOUs) voluntarily divest at least 50% of their fossil generation resources to address concerns over their possible market power in the restructured electricity market. PG&E has filed this proposal to respond to the Commission's request and to mitigate market power concerns that FERC will address before enabling PG&E and other IOUs to receive market prices for their non-nuclear generation. AB 1890 provides for plant market valuations to be completed by 2001, and the competitive bidding process PG&E proposes for the divestiture will provide an objective measure of the market value of these plants. It will also give a fair opportunity to acquire existing generation assets to those entities interested in participating in the California market. Thus, expeditiously handling PG&E's application to sell these fossil generation facilities will advance the Commission's desire and the Legislature's mandate to begin the competitive market in 1998."

DESCRIPTIONS OF POWER PLANTS TO BE SOLD

PG&E has a total of eight fossil-fueled plants. For the past five years, the three plants proposed for sale have generated between 44.7% and 52.5% of the energy produced by PG&E's fossil-fuel plants, averaging 47.1% over the five year period. The general characteristics of each plant are presented in Table 2.1 and described below.

MORRO BAY

The Morro Bay Power Plant is located on a 140-acre site (including the off-site fuel farm) located within San Luis Obispo County in the City of Morro Bay. U.S. Highway 1 runs along the eastern boundary of the site. Surrounding land uses include light industry, commercial businesses (including a hotel), marine uses, residential and recreational facilities. A mobile home park and the Lila Kaiser Park are located on the north side of the site. Estero Bay, Morro Rock, and the Pacific Ocean are located to the west of the site. The off-site fuel tank farm is

TABLE 2-1: DESCRIPTIONS OF PACIFIC GAS & ELECTRIC COMPANY FACILITIES

Facility Name	Unit[1]	Net Capacity (MW)	Type	Start-up Year	Fuel (Primary, Back-up[2])	Percentage of Hours in Service[3]
MOSS LANDING POWER PLANT		**1,478 MW**				
	6	739 MW	steam turbine	1967	natural gas, residual fuel oil	81.9%
	7	739 MW	steam turbine	1968	natural gas, residual fuel oil	82.7%
MORRO BAY POWER PLANT		**1,002 MW**				
	1	163 MW	steam turbine	1956	natural gas, residual fuel oil	42.9%
	2	163 MW	steam turbine	1955	natural gas, residual fuel oil	39.1%
	3	338 MW	steam turbine	1962	natural gas, residual fuel oil	54.4%
	4	338 MW	steam turbine	1962	natural gas, residual fuel oil	72.7%
OAKLAND POWER PLANT		**165 MW**				
	1	55 MW	combustion	1978	distillate only	0.2%
	2	55 MW	turbine	1978	distillate only	0.7%
	3	55 MW	combustion turbine combustion turbine	1978	distillate only	0.3%

1 Moss Landing Power Plant Units 1-5 were retired as of January 1, 1995.

2 Back-up fuel capability is intended to be employed only in emergency situations.

3 Averaged over a five year period (1991-1995). Indicates the percentage of time the unit was turned on, but does not necessarily indicate operation at full load.

SOURCE: Pacific Gas and Electric Company, *Application of Pacific Gas and Electric Company for Authorization to Sell Certain Generating Plants and Related Assets Pursuant to Public Utilities Code Section 851 (Application No. 96-11-020)*, November 15, 1996; and, Pacific Gas and Electric Company, *Proponent's Environmental Assessment, Pacific Gas and Electric Company's Proposed Sale of Four Generating Plants*, November 15, 1996.

located about 3.8 miles northeast of Morro Bay, surrounded by mainly agricultural land used for cattle grazing and rangeland. The off-site fuel farm consists of two aboveground residual fuel oil storage tanks, two diesel tanks for a fire water pump house, one diesel day tank, and one small diesel tank. The on-site fuel farm consists of five above-ground fuel oil tanks and a displacement diesel fuel oil storage tank. Fuel is transported from the fuel farm to the plant by pipeline. An offshore marine terminal has pipelines connected to a pumping station on shore. The pipelines to the marine terminal are currently inactive, and there are no plans to reactivate them to receive oil in the near future.

The Morro Bay Power Plant consists of four boilers, turbogenerators, and turbines and associated facilities (e.g., a switchyard, a control building, fuel oil tanks on and off site, a firewater tank and surface impoundments). The boilers are capable of burning natural gas and fuel oil, but they no longer have the capability to burn residual oil. The characteristics of the four units are described in Table 2.1. Figure 2.2 shows the location of the Morro Bay Power Plant. Figures 2.3 and 2.4 delineates the approximate boundaries of the properties being either sold or retained.

MOSS LANDING

The Moss Landing Power Plant is a 380-acre site located in Monterey County at the intersection of U.S. Highway 1 and Dolan Road, east of the community of Moss Landing. The plant is located inland from the Moss Landing Harbor in an area of light industry, agricultural lands, recreational beaches and tidal wetlands. The Elkhorn Slough National Estuarine Research Reserve abuts the site to the north. Approximately 50 residences are located within one mile of the power plant.

The Moss Landing Power Plant consists of boilers, turbine generators and associated facilities (e.g., a package boiler for start-up steam energy, a switchyard, a control building, fuel oil tanks, a firewater tank and surface impoundments). Until recently, the plant operated seven units. Five of these units have been retired whereupon PG&E has surrendered their air quality permits. Operation of these retired units in the future would require plant owners to meet current regulations and obtain new air quality permits. The power plant currently operates two single boiler steam turbine units (Units 6 and 7). The characteristics of these two units are described in Table 2.1. The boilers are capable of and permitted to burn natural gas or fuel oil, though PG&E has ended the use of fuel oil at the plant, even as a back-up fuel. Figure 2.5 shows the location of the Moss Landing Power Plant. Figures 2.6 and 2.7 show the approximate boundaries of the properties being either sold or retained.

OAKLAND

The Oakland Power Plant is located within Alameda County on a two-acre parcel of land at 50 Martin Luther King Junior Way in the western part of the City of Oakland. The area immediately surrounding the plant includes heavy and light industrial and commercial land uses.

Insert Figure 2.2: Location of the Morro Bay Power Plant

Insert Figure 2.3: Morro Bay Power Plant Property Lines (Sheet a)

Insert Figure 2.4: Morro Bay Power Plant Property Lines (Sheet b)

Insert Figure 2.5: Location of the Moss Landing Power Plant

Insert Figure 2.6: Moss Landing Power Plant Property Lines (Sheet a)

Insert Figure 2.7: Moss Landing Power Plant Property Lines (Sheet b)

The Oakland Power Plant consists of turbogenerators, three combustion turbines (CTs) and associated facilities (e.g., a control building, fuel oil tanks, a firewater tank and surface impoundments). In 1978, the plant was converted from steam generation to combustion turbine operations and now functions as a peaking unit, meaning it typically operates less than 100 hours per year. The plant can be started from a remote control center located in San Francisco, and is visited twice a day by PG&E staff. The CTs burn distillate, and have a combined net normal operating capacity of 165 MW. These units run on rare occasions when extreme peak loads are experienced (typically during summer months), and provide backup capability in the event of a single-loss contingency on PG&E's system. The combustion turbines use only distillate fuel oil, which are stored in a 48,653-barrel capacity storage tank located in an area east of Jefferson Street between Embarcadero Street and the Port of Oakland Howard Terminal. On average between the years 1991 to 1995, Units 1, 2, and 3 have been in service less than one percent of the time. The three gas turbines are connected directly to a transmission and distribution station (Oakland Station C) located across the street. Figure 2.8 shows the location of the Oakland Power Plant. Figure 2.9 delineates the approximate boundaries of the property either being sold or retained.

DESCRIPTION OF PLANTS NOT BEING SOLD IN THIS APPLICATION

If its current divestiture application is approved, PG&E will still own five fossil fuel power stations. PG&E has announced plans to divest four of these, although formal application for that sale and divestiture has not yet occurred. Those units are 1) Contra Costa units 6 and 7, located along the Sacramento River delta just east of the Town of Antioch, with a combined normal generating capacity of 680 MW; 2) Pittsburg units 1 through 7, located along the Sacramento River delta, with a combined normal generating capacity of 2,022 MW; 3) Potrero unit 3, located along the central eastern edge of San Francisco's waterfront, with a normal generating capacity of 207 MW; and 4) Hunter's Point units 1 through 4, located in eastern San Francisco along the San Francisco Bay. Following this divestiture and PG&E's planned future divestiture, PG&E would continue to own one remaining fossil power station, specifically, Humboldt Bay units 1 and 2, located on the coast just west of the City of Eureka, with a combined normal generating capacity of 105 MW. PG&E has also announced that it will apply to the CPUC for permission to sell its Geysers power plant in The Geysers region of Lake and Sonoma Counties, which runs on geothermal steam.

PG&E's anticipated second divestiture application (encompassing the four fossil power plants and one geothermal plant) is considered in the cumulative impacts analysis of this Initial Study.

PURPOSE OF ENVIRONMENTAL REVIEW

Because AB 1890 does not mandate the divestiture of generation assets held by PG&E, implementation of the proposed divestiture application entails discretionary decision-making by the CPUC. The CPUC is responsible for considering and making the determination as to what

Insert Figure 2.8: Location of the Oakland Power Plant

Insert Figure 2.9: Oakland Power Plant Property Lines

level of environmental review is required under the California Environmental Quality Act (CEQA) and CPUC Rule 17.1. The CPUC is the Lead Agency under CEQA and is responsible for preparing this Initial Study, as defined in Section 15365 of the *CEQA Guidelines*, to determine if the proposed divestiture of the PG&E power plants may have a significant effect on the environment. This Initial Study provides the CPUC with adequate information to determine whether an Environmental Impact Report (EIR) or a Negative Declaration should be prepared.