SECTION 1.0

Executive Summary

1.1 Project Overview

Pacific Gas and Electric Company (PG&E) is pleased to submit this Application for Certification (AFC) for the repowering of the Humboldt Bay Power Plant. The competitive process that resulted from PG&E's Long-Term Request for Offers (LTRFO) has yielded a solution for the Humboldt area load pocket that presents significant benefits with regards to plant efficiency, operating flexibility, and environmental improvements when compared to the existing generation at the Humboldt Bay Power Plant.

The Humboldt Bay Repowering Project (HBRP) will:

- Produce electricity 30 percent more efficiently than the existing generation
- Reduce ozone precursors by 80 percent, compared with the existing facility
- Eliminate the use of ocean water for power plant cooling at this site
- Present a lower visual profile and more aesthetically pleasing design, when compared with the existing plant
- Make use of an existing industrial site and existing electrical transmission system that are ideally suited for power generation, eliminating the need for new offsite linear features

PG&E proposes to construct, own, and operate a state-of-the-art, highly efficient and environmentally responsible electrical generating plant in Humboldt County at the site of PG&E's existing Humboldt Bay Power Plant. The HBRP will be a natural gas-fired, reciprocating engine, electrical generating facility. The project will also be capable of running on liquid fuels (California Air Resources Board [CARB] diesel) so it can ensure local area reliability during instances of natural gas curtailment in the region required by the California Public Utilities Commission (CPUC) and PG&E's CPUC Gas Tariff Rule 14. The project is proposed to be within a 143-acre site at 1000 King Salmon Avenue, Eureka, and will be sited within the boundaries of PG&E's existing Humboldt Bay Power Plant complex. PG&E filed for approval with the CPUC on April 11, 2006. The CPUC approval is expected in early 2007.

The existing plant is 50 years old and is nearing the end of its useful life and continued operation would require significant investment and modification. It consists of three electrical generating elements: (1) a 105-megawatt (MW) natural gas- and oil-fired power plant consisting of two steam turbine-generators (Units 1 and 2) with capacities of 52 and 53 MW, which began operation in 1956 and 1958, respectively; (2) a currently inoperable 63-MW nuclear-powered boiling water reactor generating unit (Unit 3); and (3) two mobile emergency power plant (MEPP) backup and peaking units of 15 MW each. The MEPPs run on liquid fuel only. Units 1 and 2 provide much of the electrical power for Humboldt

County and northwestern California. Unit 3 has not operated since 1976. The MEPPs operate as backup units when either Unit 1 or 2 is out of operation for maintenance and at times during the winter peak load period.

The HBRP is a repowering of the existing fossil-fired units (Units 1 and 2, and the MEPPs). The new plant will consist of 10 Wärtsilä 18V50DF 16.3-MW dual-fuel reciprocating engine-generators for a total repowering capacity of 163 MW. Units 1 and 2 and the MEPPs will cease operation after the new power plant has been commissioned. The new plant will only run on liquid fuel in the event of a natural gas curtailment or interruption in supply to ensure local area electric reliability. PG&E is not proposing operation on liquid fuels under economic dispatch conditions.

This project would qualify as a repowering project under the Warren-Alquist Act (Public Resources Code [PRC] §25000 et seq.) because it involves the modification of an existing unit of a thermal power plant and meets the following four criteria of a repowering project (PRC §25550.5(i):

- Complies with all applicable requirements of federal, state, and local laws
- Is located on the site of, and within the existing boundaries of, an existing thermal facility
- Will not require significant additional rights-of-way for electrical or fuel-related transmission facilities
- Will result in significant and substantial increases in the efficiency of the production of electricity, including reducing the heat rate, reducing the use of natural gas, and reducing the use and discharge of ocean water.

This project will comply with all applicable laws, ordinances, regulations, and standards (LORS), is located within the boundaries of the existing Humboldt Bay Power Plant facility, and will not require additional rights-of-way for electrical or gas transmission.

Surrounding land uses include rural residential, port-related industrial, agricultural, and recreational uses. A parcel map of the HBRP site is attached as Appendix 1A. A list of the property owners within 1,000 feet of the power plant site or 500 feet of the linear facilities is attached as Appendix 1B. Section 8.6 describes surrounding land uses in greater detail.

Figure 1.1-1 shows the location of the project site within the project region. Figure 1.1-2 is an architectural rendering of the project. Figure 1.1-3 shows the site location within its local setting. The project will have the following design features:

- Ten natural gas-fired Wärtsilä 18V50DF reciprocating engine-generators, arrayed in two groups of five engines each, and capable of low-sulfur burning diesel fuel on an emergency basis
- An air radiator cooling system (closed loop) consisting of a 40-unit radiator array
- Ten exhaust gas silencing stacks bundled in two groups of five
- Selective catalytic reduction (SCR) system to control oxides of nitrogen (NO_x) air emissions and oxidation catalyst to control carbon monoxide (CO) air emissions

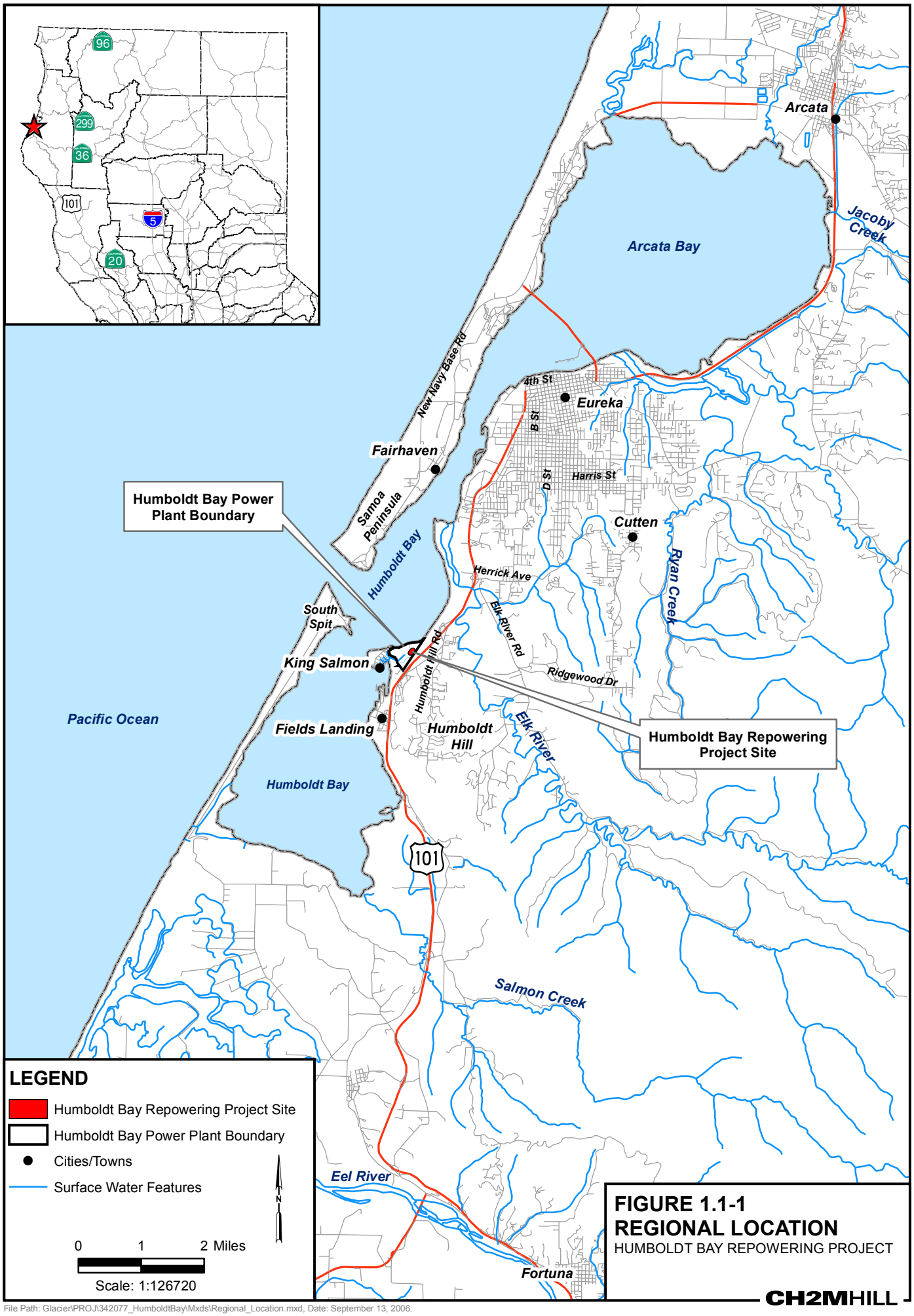

FIGURE 1.1-1
REGIONAL LOCATION
HUMBOLDT BAY REPOWERING PROJECT

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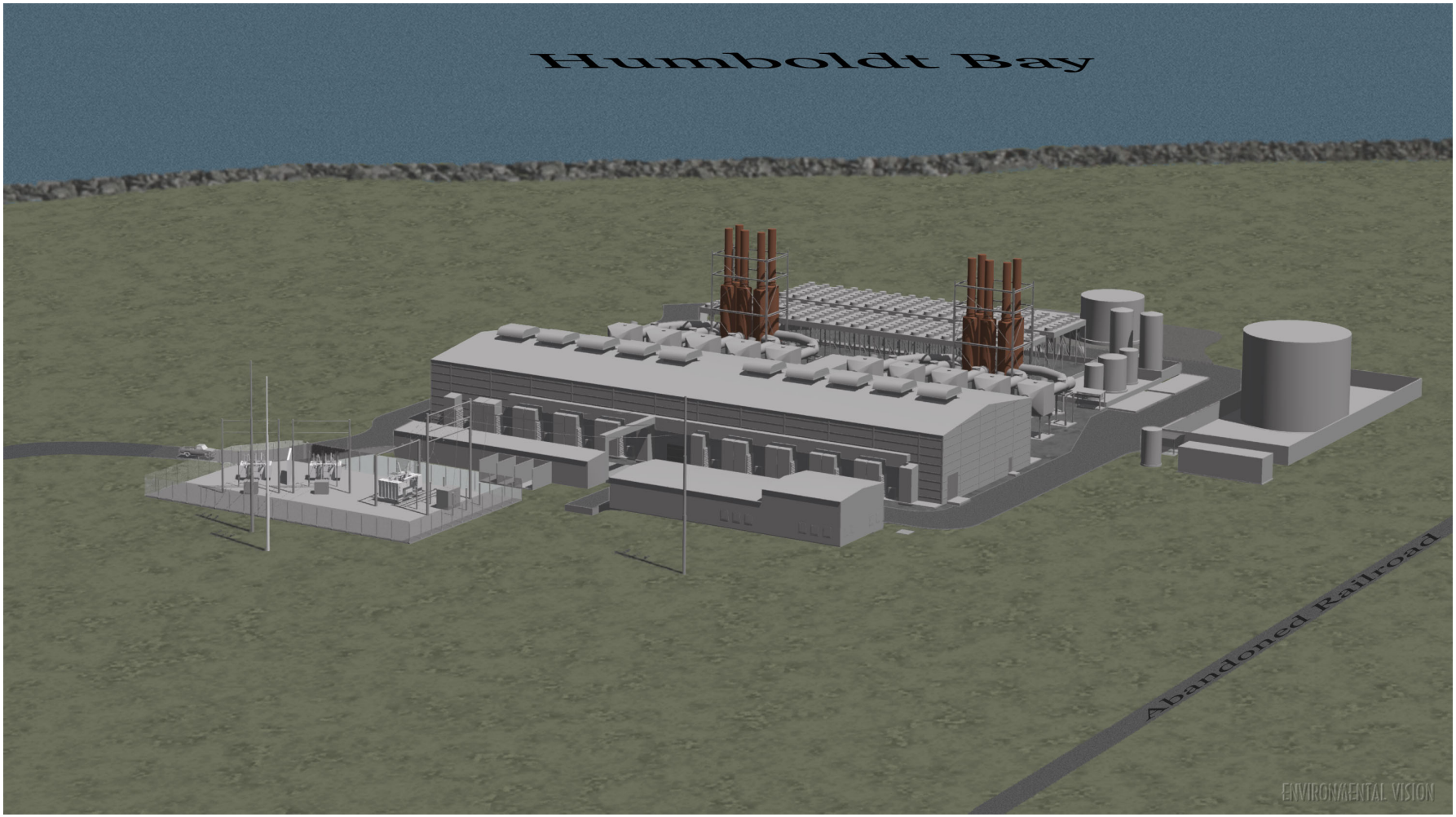

Oblique rendering of Proposed Project looking northwest, toward Humboldt Bay

FIGURE 1.1-2
ARCHITECTURAL RENDERING
HUMBOLDT BAY REPOWERING PROJECT
HUMBOLDT COUNTY, CALIFORNIA

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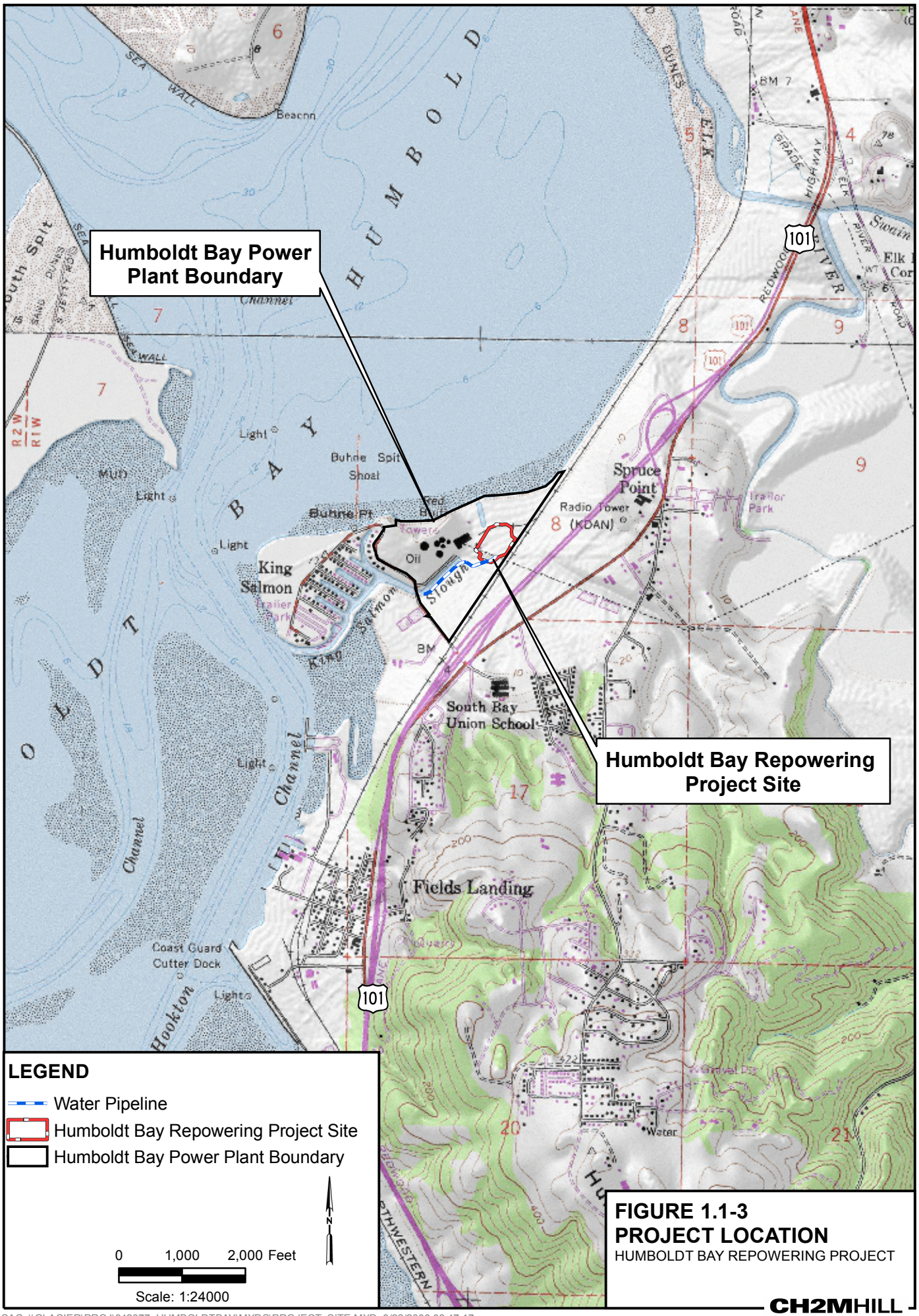

FIGURE 1.1-3
PROJECT LOCATION
HUMBOLDT BAY REPOWERING PROJECT

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- Two 60-kilovolt (kV) connections and a single 115-kV connection to PG&E's onsite transmission facilities
- A 10-inch-diameter connection to PG&E's existing 10-inch high-pressure natural gas pipeline that is on the project site and serves Units 1 and 2
- A 6-inch-diameter connection to the Humboldt Bay Power Plant's 6-inch-diameter water supply pipeline. The HBRP's water demands will be low at 1.66 gpm, relative to other types of technology, because of the close-loop air radiator cooling system
- A connection to the onsite sanitary lift station No. 3
- A 1200-foot-long 4- to 6-inch-diameter connection to the Humboldt Community Services District's water main in King Salmon Avenue

1.2 Project Ownership

PG&E owns and operates the existing units and will own and operate the HBRP. PG&E provides electricity and natural gas to most of Northern California, was incorporated in California in 1905, and is one of the largest combined natural gas and electric utilities in the United States. Based in San Francisco, the company is a subsidiary of PG&E Corporation and has approximately 20,000 employees. The company provides natural gas and electric service to approximately 15 million people throughout a 70,000-square-mile service area in Northern and Central California. PG&E's service area and facilities are as follows:

- Service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east
- 123,054 circuit miles of electric distribution lines and 18,610 circuit miles of interconnected transmission lines
- 40,123 miles of natural gas distribution pipelines and 6,136 miles of transportation pipelines
- 5.0 million electric customer accounts
- 4.1 million natural gas customer accounts

PG&E supplies 32 percent of its customer load from renewable or alternative resources—20 percent from its large hydroelectric facilities and 12 percent from small hydro and other renewable resources that qualify under California's Renewable Portfolio Standard Program. This is one of the highest renewable/alternative energy portfolio volumes of any utility in the United States. In total, nearly half of PG&E's retail load is served from generating resources that produce no carbon dioxide (CO_2) emissions that contribute to global warming.

1.3 Project Schedule

PG&E is filing this AFC under the California Energy Commission's (CEC) 12-month licensing process. Assuming the project receives a license by November 2007, construction

of the HBRP will begin in early spring 2008. Pre-operational testing of the power plant will begin in summer 2009, and full-scale commercial operation is expected to begin by fall 2009.

1.4 Project Alternatives

A "no project" alternative was considered and rejected. The no project alternative fails to meet the basic project objectives of the HBRP as described in this AFC. For example, the no project alternative is inconsistent with one of the primary objectives of PG&E's program to provide electrical power to support a continued reliable power supply to Humboldt County and northeastern California. In addition, the no project alternative could result in greater fuel consumption and air pollution because PG&E would be forced to continue to operate the existing Units 1 and 2 beyond their useful design lifetimes and even with modifications would likely operate at higher air emission rates, lower operational efficiency, and with continued need for ocean water for power plant cooling. In comparison, the HBRP will reduce emissions of ozone precursors approximately 80 percent and run with more than 30 percent greater efficiency.

The existing Humboldt Bay Power Plant site is the only site that will effectively and efficiently meet PG&E's objectives of repowering Units 1 and 2 and decommissioning the MEPPs. This site is zoned for industrial use, has served as a power generation site for more than 50 years, and has been accepted by the community as a power generating location. It is located at the nexus of a network of electrical power lines constructed expressly to distribute power from this site. This site is also served by a high-pressure natural gas pipeline, eliminating the need to construct pipelines. A complete discussion of project alternatives, including the no project alternative, is presented in Section 9.0.

Alternative routings for the project's linear appurtenances were not considered because direct connections for natural gas, electrical transmission, sanitary sewer, potable water, and raw water are available onsite.

The HBRP site was selected as a result of a competitively bid, public process that complied with PG&E's approved procurement plan. Because of this selection process and the regulatory constraints associated with utility-owned new generation, PG&E did not conduct a siting study prior to proposing the HBRP at the existing plant site. While not technically required for a repowering project, in order to cooperate fully with CEC staff, PG&E conducted an alternative site analysis in preparation of this AFC. While the CEC has reviewed many AFCs for merchant and unregulated public utilities that often contain a summary of such siting studies explaining the methodology by which an applicant has selected a particular site, PG&E's analysis was prepared after the bidding process produced the current site and configuration for the HBRP. The analysis confirms the selection of the HBRP site.

Several alternative generating technologies were reviewed in a process that resulted in the selection of clean, natural gas-fired reciprocating internal combustion engines for the HBRP. The alternative technologies included conventional oil and natural gas-fired plants, combined-cycle combustion turbines, biomass-fired plants, waste-to-energy plants, solar plants, and wind generation plants. None of these technologies was considered better than or equal to the Wärtsilä 18V50DF internal combustion engine-generators selected for the

HBRP to meet the specific needs for baseload power supply in this region. These needs include flexibility to dispatch power in small increments, and rapid startup and shutdown. These features meet the special load-following requirements necessary to provide baseload power to the electricity users in northeastern California. This topic is discussed further in Chapter 9, Alternatives.

The multi-unit configuration of this power plant design allows for modular operation. PG&E can operate as many individual generating sets as required for optimal efficiency to follow existing loads. Because single units reach optimal efficiency at 50 percent load and above, the plant can be operated efficiently anywhere between 5 percent load (1 generator set operating at 50 percent load) to 100 percent (all 10 units operating at 100 percent). No other technology can approach this kind of modularity and operational efficiency for load following economically. Standard combustion turbine technology, for example, would have to be run uneconomically and inefficiently at partial loads to meet the load-following requirements necessary for this installation.

Another significant advantage of the Wärtsilä 18V50DF technology is that it will allow for a switch to diesel fuel under emergency conditions. If there were a disruption of the site's natural gas supply, these units could switch to diesel fuel within 1 minute at any operational load lower than 80 percent. This design feature offers a flexibility that meets the project's objectives and that is not matched with competing technologies.

The following two paragraphs are taken verbatim from PG&E's prepared testimony filed with the CPUC on April 11, 2006 (Chapter 1, pages 6 and 7):

> PG&E's 2004 Long Term RFO included a solicitation to provide power to the Humboldt Bay load pocket. The Humboldt Bay Power Plant is a 135-MW aging gas- and oil-fired plant with a high heat rate that is reaching the end of its useful life and would require costly new pollution control systems for future operations, thereby making new generation located in the Humboldt Bay load pocket the most cost effective solution. A 163 MW reciprocating engine generation facility, located adjacent to the existing Humboldt Bay Power Plant, was selected as part of the LTRFO solicitation process as the best alternative.
>
> PG&E has entered into an EPC contract with Wärtsilä North America, Inc. (Wärtsilä) to construct a 163 MW generation facility utilizing reciprocating engine plant technology. This project includes 10 Wärtsilä 18V50DF dual fuel reciprocating engine-generators. All engines will be located indoors which will significantly reduce noise and visual impacts. The benefits of this technology include high reliability and efficiency, significant turn-down capability, and quick start-up and shut-down. These advantages are essential in meeting the complex operational requirements needed to maintain adequate reliability for this transmission constrained area.

In testimony submitted on behalf of the California Independent System Operator (CAISO) as part of the CPUC proceedings on August 10, 2006, it was stated:

> …reciprocating engines have very fast start up and shut down capabilities. They are very stable for large load pickups and can provide voltage support and stability for remote areas. This type of unit is ideally suited for the Humboldt area that is served

by a very limited amount of transmission. In the event there is a transmission contingency, these units can be rapidly started to provide reliability to the local area. If they are already online, their governors can rapidly respond to the need to pick up the local loads in the event the major transmission lines to the area are forced out of service. The current generation in the Humboldt area has some limitations on meeting this objective so the installation of these new reciprocating engines should increase the reliability of the energy supply to customers in this area.

PG&E remains committed to meeting or exceeding California's Renewable Portfolio Standard. An additional benefit of the Wärtsilä reciprocating engine technology stems from its modular design. As new renewables capacity is brought on line in the Humboldt region, the modularity and resulting load-following flexibility and capability of the HBRP will allow for the firming of power from intermittent renewable sources (such as wind and wave), while maintaining plant efficiency throughout the load range. The Wärtsilä reciprocating engine technology is currently serving this function for new wind generation very successfully in other portions of the western United States.

1.5 California Coastal Commission

The HBRP is in the Coastal Zone within the retained jurisdiction of the California Coastal Commission (CCC). Pursuant to PRC Sections 25523(b) and 30413(d), the CCC is required to prepare a report specifying whether the project meets the objectives of the California Coastal Act. The report is required to include findings on the following items:

1. The compatibility of the proposed site and related facilities with the goal of protecting coastal resources.
2. The degree to which the proposed site and related facilities would conflict with other existing or planned coastal-dependent land uses at or near the site.
3. The potential adverse effects that the proposed site and related facilities would have on aesthetic values.
4. The potential adverse environmental effects on fish and wildlife and their habitats.
5. The conformance of the proposed site and related facilities with the Humboldt County certified local coastal program.
6. The degree to which the proposed site and related facilities could reasonably be modified so as to mitigate potential adverse effects on coastal resources, minimize conflict with existing or planned coastal-dependent uses at or near the site, and promote the policies of the California Coastal Act.
7. Such other matters as the commission deems appropriate and necessary to carry out this division.

The HBRP meets the objectives of the Coastal Act. Coastal resources will be protected and, in fact, improved. The site layout was developed with the goal of avoiding wetlands and the minimal impact to wetlands will be mitigated through the restoration, enhancement, and creation of wetlands in the area of the project site. The HBRP will also improve coastal

resources because it will lead to the cessation of operations of the existing Humboldt Bay Power Plant Units 1 and 2. This will result in the cessation of ocean water use for once-through cooling of Units 1 and 2 at the site.[1] The HBRP will not conflict with existing or planned coastal-dependent land uses at or near the site, and it is consistent with the Humboldt County Local Coastal Plan. Aesthetically, the HBRP plant features are of a smaller scale and mass than the existing Humboldt Bay Power Plant and will not produce water vapor plumes. And although it is not a part of the HBRP project, the eventual demolition of Units 1 and 2 will improve the scenic values in the project vicinity.

1.6 Environmental Considerations

Pursuant to the requirements set forth in existing environmental laws and the CEC's regulations, 16 areas of possible environmental impact from the proposed project were investigated. Detailed descriptions and analyses of these areas are presented in Sections 8.1 through 8.16 of the AFC. As discussed in detail in this AFC, with the implementation of the proposed mitigation measures and the anticipated Conditions of Certification, there will be no significant unmitigated environmental impacts associated with the construction and operation of the HBRP. In fact, when compared to the existing facility, the HBRP will result in significant environmental improvements in the areas of air quality, fuel efficiency, and water usage. This Executive Summary highlights findings related to five subject areas that have historically been of interest in CEC proceedings: air quality, biological resources, noise, visual resources, and water resources.

1.6.1 Air Quality

The entirety of the North Coast Air Basin has been designated as "attainment" or "unclassified" for the national ambient air quality standards for all criteria pollutants (CO, ozone, sulfur oxides, nitrogen dioxide, and respirable particulate matter) and is subject to "Prevention of Significant Deterioration" permit requirements. The air basin has been designated a "nonattainment" area for California's PM_{10} (particulate matter less than 10 micrometers in equivalent diameter) standards. The potential air quality impacts from the HBRP will be mitigated by the installation and operation of Best Available Control Technology (BACT) for the reciprocating engines and support equipment and by retirement of the existing Units 1 and 2 and the MEPPs. Emission reductions from the shutdown of these units will represent "real-time" emission reductions and will be used to offset the project's emissions of PM_{10} and reactive organic compounds. These mitigation measures will result in the project having no significant adverse impact on air quality or public health. See Section 8.1 for a detailed analysis of air quality.

1.6.2 Biological Resources

Wetland avoidance was a primary goal in developing the site layout for the HBRP. Use of existing paved or graveled areas and reuse of existing Humboldt Bay Power Plant facility sites were maximized in the placement of the HBRP footprint and laydown areas. Detailed wetland delineations were used to further refine the location of permanent and temporary facilities. Minimization of impacts to wetlands in adjacent, offsite land areas will be

[1] Unit 3 will still require the use of ocean water for dilution until the Independent Spent Fuel Storage Installation is in operation.

accomplished through implementation of Best Management Practices, erosion control, and biological monitoring for compliance during construction in the temporary impact areas, especially near the shoreline, drainages, and waterways. A biological resources mitigation plan has been developed that identifies mitigation opportunities within the project area and PG&E property that will lead to a "no net loss" of wetland function through the enhancement of wetland values by in-kind and out-of-kind creation, restoration, and enhancement mitigation measures. These mitigation measures will result in the project having no significant adverse impact to wetlands or biological resources. See Section 8.2 for a detailed analysis of biological resources.

1.6.3 Noise

PG&E conducted 25-hour ambient noise monitoring at the nearest residences to the HBRP and calculated the existing average ambient (L_{eq}) and day-night (L_{dn}) noise levels. The L_{dn} includes a 10-decibel weighting for the hours between 10:00 p.m. and 7:00 a.m. to account for the greater sensitivity of people to noise at night. The noise survey indicated that the existing Humboldt Bay Power Plant and U.S. Highway 101 are significant contributors to the noise spectrum in the project area. The ambient noise levels at the nearest residential receptor on King Salmon Avenue averaged 49 dBA L_{eq} (54 L_{dn}). The daytime average (7:00 a.m. to 10:00 p.m.) was 52 dBA L_{eq}, and the nighttime average (10:00 p.m. to 7:00 a.m.) was 46 dBA L_{eq}. According to the Humboldt County General Plan, 55 dBA L_{dn} is a clearly acceptable exterior residential ambient noise level and 65 dBA L_{dn} is normally acceptable.

Noise attributable to the HBRP operating at maximum power (163 MW, 10 generators) during the daytime would be approximately 52 dBA (56 dBA L_{dn}), at this monitoring location, according to computer modeling. The HBRP would thus meet the County General Plan standard and would not exceed the average ambient noise level at this location by more than 5 dBA. Because the HBRP is a load-following plant, it would seldom operate at full load, particularly during the quietest nighttime hours when demand for electricity is lowest. It would generally be quieter than this 52 dBA modeled noise level—up to 10 dBA quieter, depending on the number of generators in operation. For example, at the average historical nighttime load of 32 MW (two generators), project noise levels would be 42 dBA at night and during cooler winter days (45 dBA daytime).[2] With a single generator operating (16 MW), the noise level would be 39 dBA at night (42 dBA daytime).

The existing plant will cease operation once the HBRP comes online. The HBRP will essentially replace this noise source, will not exceed the County's General Plan noise standard, and will not cause a significant increase in the levels of ambient noise at the nearest residential receptor. See Section 8.7 for a detailed analysis of project noise.

1.6.4 Visual Resources

The most prominent visual features of the HBRP will be the exhaust gas silencer stack bundles, at 75 feet; diesel tank, at 40 feet; and engine hall, at 45 feet (to the top of the roof vents). Analysis of photographic simulations of the HBRP from Key Observation Points (KOPs) shows that the project would be seen within the context of an existing power plant

[2] The HBRP uses a variable-speed radiator fan design. At temperatures below 60 degrees F, the plant will be on average 3 dBA quieter.

facility that is an established element of the landscape setting. The new facilities will generally be substantially lower in height and smaller in scale than the existing facilities. A comparison of "before" and "after" images from six KOPs demonstrates that the project will not substantially obstruct open views of Humboldt Bay that are currently available from the project area.

To varying degrees, the tree removal required for project construction will affect views from the surrounding area. However, new landscaping including native, evergreen trees and shrubs will be installed as part of the project. The new landscaping will be designed to not only replace but also increase the level of screening of the site. The HBRP would therefore represent an incremental visual change to existing visual conditions. This change would not substantially alter views of the site and surrounding area. The HBRP would not cause significant adverse impacts to visual resources.

One consequence of the HBRP is that the existing Humboldt Bay Power Plant would cease operation. Once this takes place, the existing plant will no longer produce visible water vapor plumes. The HBRP will not generate visible vapor plumes because it uses a closed-loop, dry cooling system. Although not a part of the HBRP, the existing Humboldt Bay Power Plant will likely be demolished within the coming years. Removal of the 100-foot-tall steam boilers and 120-foot-tall stacks will significantly reduce the overall visual profile of the manmade structures on the project site. In this way, the cumulative effect of the project combined with other foreseeable projects would result in a net benefit in terms of visual resources. Section 8.13 contains a detailed discussion of the visual resources assessment.

1.6.5 Water Resources

As stated earlier, the HBRP will use little water for cooling or other purposes, compared with traditional simple-cycle or combined-cycle turbine designs. The project will use an air radiator cooling system by which water circulates between the engines and the radiators in a closed-loop system. The water used in the cooling system (as in an automobile's radiator cooling system) is continually recycled and is not used for evaporative cooling, as in a cooling tower system. The HBRP will not discharge wastewater from power plant cooling processes, for the same reason.

One consequence of the HBRP will be that existing Units 1 and 2 will cease operation. These units are presently cooled using ocean water from Humboldt Bay in a once-through cooling design that uses approximately 52,000 gpm. Once the HBRP is operational, Units 1 and 2 will discontinue pumping ocean water for power plant cooling. Pumps will continue to operate to provide dilution water for Unit 3 until the Independent Spent Fuel Storage Installation (ISFSI) is in place. However, this use will require only 12,900 gpm. Upon completion of the ISFSI, the use of ocean water will cease at the Humboldt Bay Power Plant.

1.7 Key Benefits

1.7.1 Environmental

The HBRP will use efficient reciprocating engine technology and SCR and CO catalyst to minimize emissions. NO_x emissions (a precursor to ozone formation) produced by the

HBRP will be at least 80 percent less per megawatt than those produced by the older, existing units (Units 1 and 2 and the MEPPs) that will be shut down. In addition, the HBRP's new technology and improved operating efficiency will enable the plant to consume less fuel per megawatt-hour of electricity produced than older plants of similar size. This new technology is greater than 30 percent more efficient than the existing Units 1 and 2.

The project will also have significant environmental benefits in terms of water use, as stated above. Whereas the existing plant is cooled by water from Humboldt Bay (once-through cooling), the new plant uses an air radiator cooling system that uses a small amount of water, approximately 1.66 gpm and 2.7 acre-feet per year. This is approximately one four-hundredth of the cooling water demand of a conventional combined-cycle turbine-generator installation.

The project will also have environmental benefits in terms of visual resources. The HBRP will require the cessation of operation of Humboldt Bay Power Plant Units 1 and 2. Although not a part of the HBRP project, construction and operation of the HBRP will enable the decommissioning and eventual demolition of these units. Units 1 and 2 are large and visible structures with relatively massive steam boiler housings 100 feet high and 120-foot-high stacks. Their eventual removal will enhance the scenic qualities of the project area, which is located along U.S. Highway 101. The HBRP will replace these structures with a low-profile engine hall and much lower stacks.

1.7.2 Employment

The project will provide for an average of approximately 101 construction jobs over a 18-month period with a peak of 236 craft during months 11 and 12 and will sustain approximately 17 technical and skilled, family-wage positions throughout the life of the plant. In addition to the direct employment benefit, the HBRP plant will require and use the services of local or regional firms for major maintenance and overhauls, plant supplies, and other support services throughout the life of the facility.

1.7.3 Energy Efficiency

The HBRP will be an efficient, environmentally responsible source of economic and reliable electrical energy to serve the growing energy demands of Northern California. As stated previously, constructing the HBRP project will result in a more than 30 percent greater operating efficiency, compared with current operation. The operational efficiency of this power plant will be far superior to the existing Humboldt Bay Power Plant or to other power plant technologies because of its modularity and flexibility, which will allow operation to follow demand closely.

1.8 Community Outreach and Corporate Citizenship

PG&E has generated electricity in Humboldt County since the early 1940s and, in 1954, began construction on the first Humboldt Bay Power Plant, Unit 1. Unit 1 went commercial in 1956, and the second natural gas boiler, Unit 2, went commercial in 1958. Both of these units still operate today with much of the original equipment installed over 50 years ago, and they are still capable of generating 105 MW per their original design capacity. The

Humboldt Bay Power Plant also includes Unit 3, which was commissioned in 1963 as a 65-MW nuclear power plant and officially decommissioned in 1984.

During the time that PG&E has operated the Humboldt Bay Power Plant, PG&E has been an active and highly respected corporate citizen in Humboldt County. In the mid 1990s, PG&E formed a Community Advisory Board (CAB) for the Humboldt Facility. The CAB consists of County and City elected officials, primary intervener organizations, local school superintendent, and neighbors. The CAB meets two to three times per year or when plant events or activities warrant. PG&E asked CAB members for their perspective on major projects or planned activities, like how best to communicate activities associated with the nuclear facility to the local community.

From 2003 to 2005, PG&E pursued the ISFSI, a long-term storage solution for the spent nuclear fuel which would allow the dismantling of the shutdown nuclear facility (Unit 3). For this project, also known as the dry cask storage project, PG&E conducted a wide-ranging outreach effort in the community. Since announcing the HBRP in early April 2006, PG&E has made use of the existing information and communication network developed over the years of Humboldt Bay Power Plant operation and for the ISFSI program. PG&E has conducted numerous meetings with the Humboldt Bay CAB, local elected officials, community leaders, city councils, special interest groups, and local labor to introduce the HBRP to the local community, and support for the project and press coverage have both been positive. Relevant coverage is presented in Appendix 1C. An event entitled "Humboldt Bay Power Plant Tomorrow" is being held at the Humboldt Bay Power Plant on October 7, 2006, to (1) celebrate the plant's 50-year anniversary of the existing fossil facility, (2) further introduce the HBRP and the project team to the community, (3) discuss the future of the nuclear facility and the ISFSI project, and (4) discuss energy efficiency, demand response, and renewable resources.

PG&E has donated labor and materials to a local school (South Bay Elementary School). Materials include portable environmental monitoring equipment and a wireless computer lab. PG&E has provided grants to schools and community organizations in Humboldt County since 1999. In addition, in 2005 PG&E donated sirens from the Diablo Canyon Power Plant to the National Weather Service in Humboldt County.

Over the last few years, local support for PG&E at the Humboldt Bay Power Plant has been very positive, the community has come to better understand the role that local generation plays in the area and PG&E has communicated its plans to improve the existing condition at the facility. These plans include moving the nuclear facility toward final dismantling and the installation of a cleaner, more efficient, state-of-the-art generating plant. PG&E is committed to continuing the positive relationship with the community through ongoing communications and involvement.

1.9 Persons Who Prepared the AFC

Persons with primary responsibility for preparing each section of this AFC are listed in Appendix 1D.