

September 21, 1998



Mr. Bruce Kaneshiro, Project Manager
c/o Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Re: Comments on the Draft Environmental Impact
Report for Pacific Gas and Electric Company's Proposed
Divestiture Application No. 98-01-008

Dear Mr. Kaneshiro:

PG&E hereby submits the attached comments on the Draft Environmental Impact Report (Draft EIR) for PG&E's proposed divestiture of its Potrero, Contra Costa, Pittsburg, and Geysers Power Plants. The comments are provided in two sections; the first section contains general comments and the second section contains specific comments by page number.

PG&E appreciates the opportunity to comment on the Draft EIR, and urges the Commission to certify the EIR as final as soon as possible.

If you have any questions, please call me at (415) 973-1595.

Sincerely,

A handwritten signature in cursive script that reads "Cecilia F. Montana".

Cecilia F. Montana
Acting Director, Divestiture and Gas Ratemaking

Attachment

**PG&E'S COMMENTS TO THE CPUC
ON THE DRAFT EIR FOR PG&E'S APPLICATION NO. 98-01-008
September 21, 1998**

GENERAL COMMENTS

1. Conservative Nature of the Analytical Methodology. PG&E would like to underscore the first sentence in the section of the Draft EIR that describes the analytical methodology employed throughout the document. The Draft EIR states, "In reading this EIR, it is important to understand the uncertainty involved in predicting the future behavior of PG&E or new plant owners; the legal framework in which this divestiture proposal exists; and the conservative nature of and bases for the assumptions used throughout the document to evaluate the environmental impacts of the project" (page 3-1).

Due to the uncertainty inherent in predicting the behavior of PG&E and new owners in the new restructured market, the analysts created hypothetical scenarios. Some scenarios predicted what PG&E's behavior might be in the future and other scenarios predicted the behavior of unknown future plant owners.

[Begin L1]

While creating the scenarios, the EIR drafters had a wide array of assumptions from which to choose. The drafters consistently selected the most conservative assumptions, that is, the assumptions that would result in the greatest potential for environmental impacts. This process was repeated for each of the scenarios so that the analysis would represent a reasonable worst case. The analysis therefore overestimates the potential for environmental impacts.

[End L1]

This consistent leaning toward the worst case resulted in scenarios that the EIR characterizes as unlikely. For example, the fundamental basis for the analyses is that new owners might operate the plants at higher levels than might PG&E. The EIR cautions that "the degree to which generation would increase at the plants slated for divestiture is highly uncertain" (page 3-8). Further "it is not possible to determine with any precision at which plants operations would increase, or the degree to which operations would increase at any particular plant" (page S-8).

[Begin L2]

One of the most influential assumptions in the analysis is that, for new owners of the fossil-fueled plants but not PG&E, "natural gas could be purchased in unlimited quantities at a 25 percent discount from the least expensive supply of gas assumed to be available to fuel California power plants" (page 3-12). This assumption is an artificial construct. It was used to force the computer model to move in the desired direction, that is, toward a greater potential for environmental impact. As the EIR points out, "The purpose of this assumption was to remove, to a great degree, the cost of fossil fuel from the new owner's decision whether and when to generate power. Although it is extremely unlikely that such a reduced gas price could be obtained, this assumption further strengthens the conservative nature of the impacts analysis" (page 3-12).

[End L2]

[Begin L3]

It is indeed unlikely that a new owner would ignore the price of fuel in its decisions. It is also highly unlikely that a new owner, and only a new owner, would be able to purchase natural gas for 25 percent less than its California competitors. It is more likely that similar gas prices would be available for all generators and the generator with the most favorable economics would tend to generate more than one with less favorable economics. In any case, total generation would be limited by overall demand. Nevertheless, PG&E recognizes that the Draft EIR analysts employed this conservative approach in order to examine the greatest potential for environmental impacts. As such, the potential

impacts identified in the EIR are indeed only potential, and are potential only under an extreme set of circumstances. The projections should not be used or relied upon for purposes of reasonable economic forecasting.

[End L3]

[Begin L4]

2. New Owners of the Geysers Geothermal Plant. Alternative 3 in the Draft EIR evaluates whether there might be an environmental benefit if the Geysers plants were sold to the steam field operators. The analysis concludes that to do so would be environmentally preferable, as it "would allow for greater coordination of generating unit operations with steam field characteristics and may reduce steam stacking" (page 6-28). This is an inappropriate "conclusion" for two reasons.

First, the alternative presumes that there would be "greater coordination". This is an assumption embedded in the design of the alternative (page 6-23), not a conclusion derived from analysis. No evidence is presented that current operations are not now coordinated nor that they could be more coordinated.

In fact, PG&E's contract with UNT to supply steam for the units in Sonoma County and PG&E's contract with Calpine to supply the steam for units in Lake County both require the companies to coordinate operations¹. To do so, the companies have instituted operational procedures and monitoring equipment specifically to prevent unabated steam releases, or "steam stacking".

Steam stacking can occur when generation is reduced. Such reductions may be scheduled or unscheduled. In the case of scheduled reductions, such as for unit maintenance, the steam field agreements require PG&E to notify the steam field operators at least 48 hours in advance. In the case of unscheduled reductions, monitors installed on PG&E's generating units and the steam suppliers' steam gathering systems immediately transmit changes in generation and steam pressure. The signals from the monitors are automatically relayed to Unocal's and Calpine's control centers, which are staffed 24 hours a day. When a signal is received, the steam suppliers automatically throttle the wellhead valves, which redirects the steam to other generating units with emissions abatement equipment. This monitoring system has been successfully operating for several years.

[End L4]

[Begin L5]

Secondly, the computer modeling for this alternative assumes that "the existing steam supply contracts would be inapplicable (because the contracting parties would be merged into one steam supplier/plant owner for each unit) and the price of steam to the plants would decline" (page 6-6). The modeling results show that the Geysers plants would operate more under Alternative 3 than under the other scenarios. The Draft EIR concludes that, due to this increase in operations, there would be less steam stacking. While the computer modeling results show a significant increase in year 1999, the increase is slight by the year 2005. In 2005, the modeled annual plant capacity factors under the proposed project (Cumulative Analytical Maximum Scenario), continued ownership by PG&E (Draft EIR Alternative 1), and ownership by the steam field operators (Alternative 3) are 87, 90, and 93 respectively (page 6-7). Thus, according to the model, the increase would be 6 percent averaged over 14 units. Due to the infield systems to prevent unabated steam releases, such an increase in operations would not result in a significant benefit, if any.

[End L5]

¹ See Section 5 of PG&E's Agreement for the Sale of Geothermal Steam Between Thermal Power Company and Pacific Gas and Electric Company Dated July 28, 1992 (as amended August 22, 1993), Agreement for the Sale of Geothermal Steam Between Union Oil Company of California and Pacific Gas and Electric Company Dated September 30, 1991 (as amended August 22, 1993), Agreement for the Sale of Geothermal Steam Between NEC Acquisition Company and Pacific Gas and Electric Company Dated September 30, 1991 (as amended August 22, 1993). See also, Section 8 of PG&E's Agreement for the Sale and Purchase of Geothermal Steam Between Signal Oil and Gas Company [a.k.a. Calpine] and Pacific Gas and Electric Company Dated March 23, 1973.

[Begin L6]

As the Draft EIR notes, the analysis of the proposed project does not indicate that the project would result in any change related to steam stacking. "Therefore, this alternative would not be necessary to reduce project impacts. It may, however, beneficially reduce steam stacking and release events" (page 6-24). In PG&E's opinion, Alternative 3 has not demonstrated that selling the Geysers units to the steam field operators would be any more or less environmentally preferable to selling the units to a third party. It should also be noted that the steam field operators have a right of first refusal to purchase these units, as stated elsewhere in the Draft EIR.

[End L6]

[Begin L7]

The CPUC has no responsibility to choose the environmentally preferable alternative. The California Environmental Quality Act (CEQA) Guidelines require that the lead agency identify an environmentally superior alternative among other alternatives analyzed². However, CEQA does not require the agency to choose the most environmentally desirable alternative if the agency has reduced the project's environmental effects to an acceptable level through mitigation.³ The CPUC does not have authority to order the sale of the plants to a particular buyer without PG&E's consent.

[End L7]

[Begin L8]

3. Cumulative Analysis. In Section 5.2.2, the EIR describes the assumptions made in the cumulative analysis regarding new generation to replace the Hunters Point Power Plant. The EIR notes on page 5-4 that:

"The exact size, mix and location of facilities that will ultimately be proposed and approved to replace the Hunters Point Power Plant is speculative. However, in order to portray and evaluate (in at least a generalized nature given the paucity of definitive data and plans) the maximum potential for change in the context of the cumulative impact analysis for this project, it is assumed for purposes of this EIR that new generation facilities would be constructed by 2005 to serve the City's electricity needs. This cumulative analysis assumes that the new facilities would consist of two new combined-cycle electric generating units sized at 240 MW each (totaling 480 MW)."

PG&E would like to underscore that the facility assumed in the cumulative analysis is a hypothetical facility. The generation and/or transmission facilities that will replace the power and reliability now provided by the Hunters Point plant are not known at this time. It will be incumbent on the proponents of the new facilities, and the agencies that must approve the project(s), to evaluate, in compliance with the California Environmental Quality Act, the potential for project-specific and cumulative environmental impacts associated with the new facilities and to address any significant environmental effects.

[End L8]

SPECIFIC COMMENTS BY DRAFT EIR SECTION

EXECUTIVE SUMMARY

[Begin L9]

Page S-4, Figure S.2. Please note that PG&E will also continue to own the Diablo Canyon Nuclear Power Plant, located in San Luis Obispo County. (The same figure is used as Figure 2.1 on page 2-3.)

[End L9]

² See, 14 Cal. Code Regs. 15126(d)(4).

³ See, Laurel Heights Improvement Association v. Regents of the University of California, 47 Cal. 3d 376, 402 (1988); Kosta, Stephen L. and Zischke, Michael H., Practice Under the California Environmental Quality Act sections 17.20 - 17.22, pgs. 656 - 663.

[Begin L10]

Page S-5, paragraph 3. The paragraph states that "PG&E will retain facilities and equipment at each site that pertain to transmission or distribution operations." Please note that PG&E will divest a small portion of the transmission lines at the Geysers Power Plant, as stated elsewhere in the document (e.g., pages 2-7, 2-28, and 4.12-17).

[End L10]

[Begin L11]

Page S-5, paragraph 4. The Summary states that "The Purchase and Sale Agreement for each plant requires a deed restriction that prevents the new owner from using the site for residential or other sensitive uses." This is true for the fossil-fueled plants. However, for the Geysers plant, the Purchase and Sale agreement requires the purchaser to agree to a land use covenant that will require the purchaser (and its subsequent transferees, if any) not to use the property for residential or other sensitive uses. (See also pages 4.1-13 and 14.)

[End L11]

[Begin L12]

Page S-21, Table 2.6. Please note that the levels of significance indicated for Impacts 4.5-4, 4.5-5, and 4.9-3 for the proposed project should include an "(M)" to indicate that the EIR has identified supplemental mitigation for each of these impacts.

[End L12]

2. PROJECT DESCRIPTION

[Begin L13]

Page 2-5, paragraph 2. Please replace the last sentence regarding PG&E's hydroelectric assets with "PG&E is currently considering various options for market valuation of its hydroelectric assets".

[End L13]

[Begin L14]

Page 2-20, paragraph 2. All three boilers associated with Units 5, 6, and 7 are capable of burning residual fuel oil.

[End L14]

[Begin L15]

Page 2.42, paragraph 2. The Draft EIR states that "Early reinjection of wastewater from the Southeast Geysers effluent pipeline have been encouraging. There has been about a 7 percent (60 MW) increase in capacity in the Southeast Geysers field as reported by staff at the Geysers Power Plant." Upon closer examination of the peak output achieved by the four PG&E plants that are in the Southeast area of the steam field, PG&E believes that 7 percent overstates the increase. A more accurate estimate would be that there has been about a 5 percent increase in capacity. In addition, given the design capacities of the four Southeast Geysers Units (Units 13, 16, 18, and 20) listed on Table 2.1 (pages 2-8 and 9), it appears that the 7 percent increase resulting in a 60MW increase is a miscalculation

[End L15]

[Begin L16]

Pages 2-44 and 45, Table 2.3. (1) There is also a lease from the State Lands Commission for public land associated with the Contra Costa plant. (2) Note that the Aboveground Petroleum Storage Tank requirement applicable to the Geysers plant is not a permit per se. The requirement includes a biannual statement, registration fee, and SPCC plan.

[End L16]

4.4 WATER RESOURCES

[Begin L17]

Page 4.4-5, paragraph 1. The last sentence states that “Sodium hypochlorite is regularly applied in the condensers to minimize growth of biological organisms and is then discharged”. Please note that, in accordance with the NPDES permit for the plant, the sodium hypochlorite is neutralized with sodium bisulfate before discharge.

[End L17]

4.5 AIR QUALITY

[Begin L18]

Page 4.5-14, paragraph 3. Note that since the beginning of 1994, PG&E has essentially ended using fuel oil. However, fuel oil may still be used in limited circumstances. Under BAAQMD Regulation 9, Rule 11, only natural gas is to be burned in these units, except during force majeure natural gas curtailment and very limited testing.

[End L18]

[Begin L19]

Page 4.5-24, paragraph 2. The paragraph states “Unit 3 is coupled to a single boiler, which is capable of burning natural gas or fuel oil; however, since 1995, only natural gas has been burned because of Regulation 9, Rule 11”. The sentence could leave the misimpression that the switch to natural gas occurred because of Regulation 9, Rule 11. However, the fuel switch was made prior to when the regulation became effective in 1997. The sentence could be clarified by stating, “since 1994, PG&E has only burned natural gas and Regulation 9, Rule 11 requires that natural gas be burned except in very limited circumstances”.

[End L19]

[Begin L20]

Page 4.5-34, last sentence. Please delete the reference to the mobile combustion turbine at the Contra Costa plant. It is no longer at this plant.

[End L20]

[Begin L21]

Page 4.5-39, last paragraph. The paragraph incorrectly states “While two of the seven boilers are permitted to burn either natural gas or fuel oil, all of them currently burn only natural gas.” All seven boilers are permitted to burn fuel oil as long as permit and rule conditions are followed.

[End L21]

[Begin L22]

Page 4.5-47, paragraph 4. The paragraph refers to measurements of radon at the Geysers plant “that indicated levels of radon ranging from 3 to 5 pico-curies per liter of air, which is above typical background levels of 1 pico-curie per liter (1998, personal communication with Lake County APCD)”. This range is substantially higher than the measurements reported as part of Geysers Air Quality Monitoring Program (GAMP), which measures radon at two monitoring sites in public areas of the Lake County geothermal area that are downwind of the plant. The most recent quarterly GAMP report of April 1 to June 30, 1998, which reported data for January, February, and March 1998, reported a radon range of 0.1 to 0.5 pico-curies per liter (pCi/l), with an average of 0.2 to 0.3 pCi/l. These measured levels are about 1/10th of the levels identified in the Draft EIR.

[End L22]

[Begin L23]

Page 4.5-61, last sentence. The Draft EIR indicates that the air quality modeling was performed using the AP-42 emissions factors that the U.S. EPA released earlier this year (per U.S. EPA reference listed on page 4.5-84). The Draft EIR refers to these factors as “new, more accurate data reported by EPA for

combustion units". PG&E questions whether the new factors are indeed more accurate. The new factors for PM-10 are based on a very small sample – only four tests nationwide. In addition, for the first time, the EPA has reported separate emissions factors for the filterable fraction of PM-10 and a condensable fraction. There is reason to believe that the condensable fraction is purely an artifact of the sampling procedure as a result of nitrates or sulfates present in the exhaust steam. The EPA has itself indicated little confidence in the factor for the condensable fraction. On a scale of A to E, with A being the highest confidence, the EPA rates its confidence in the factor for the condensable PM fraction for boilers as D. If only the filterable fraction is used in the emission factors, the modeled PM-10 results would drop by a factor of 4.

[End L23]

4.7 BIOLOGICAL RESOURCES

[Begin L24]

Page 4.7-30, paragraph 3. The fourth sentence states "The revised draft HCP (dated April 22, 1998) and associated permit application documents have been reviewed and deemed completed by USFWS and NMFS staff in June 1998." To date, PG&E has not received the certificate of completion. Please delete the sentence.

[End L24]

[Begin L25]

Page 4.7-30, paragraph 3. To update the paragraph, in the fifth sentence, please delete "intend to adhere to" and replace with "concur with", and delete "July 1998" and replace with "September 1998". Similarly, in the last sentence of the paragraph, replace "staff" with "proposed" and replace "October 1998" with "December 1998".

[End L25]

[Begin L26]

Page 4.7-31, second bullet. As required by the federal agencies, the funding is now to be maintained in "a special deposit account".

[End L26]

[Begin L27]

Page 4.7-35, paragraph 3. The federal agencies have emphasized that the Implementing Agreements and HCPs are not transferred, but are part of the permit and reissued along with the reissued permit. As such, in the fourth sentence, please delete "and transfer of the draft Implementing agreement" and substitute with "including the related Implementing Agreement", and delete "to the new owner".

[End L27]

[Begin L28]

Page 4.7-35, paragraph 3. To update this paragraph, please delete the two sentences that begin with "USFWS has proposed" and end with "within a 60-day period", and replace with "The USFWS has concurred with this language".

[End L28]

[Begin L29]

Page 4.7-35, paragraph 3. For clarification, please revise the last sentence as follows: "Accordingly, if the Section 10 Permits are issued to PG&E at least 60 days prior to closing, the permits should be reissued to the new owner at closing, and the new owner will be subject to the restrictions of such permits and the CESA MOU to the same extent PG&E would have been.

[End L29]

[Begin L30]

Page 4.7-36, paragraph 3. For clarification, please delete "As a condition of closing the sale, the new owner will be required to obtain" and replace it with "If the Section 10 permits have been reissued to PG&E prior to closing, the new owner will be required to seek".

[End L30]

[Begin L31]

Page 4.7-37, top of the page. Under "Timing", to capture all of the monitoring actions associated with the mitigation measure, please revise the sentence to read: "Documents should be provided to the CPUC at least forty days before the title transfer, copies of the letters should be provided to plant managers at the close of sale, and the Section 10 Permits should be provided to CPUC when obtained."

[End L31]

[Begin L32]

Page 4.7-37, Level of Significance after Mitigation. For clarification, the term "Operational Constraints" should be in lower case as it is no longer a defined term. Also, please insert after "operational constraints", the phrase "in PG&E's Section 10 Permits and the HCP".

[End L32]

4.9 HAZARDS

[Begin L33]

Page 4.9-4, last paragraph. The section states that "No acutely hazardous materials are used or stored at the Potrero Power Plant." However, lead-acid batteries are used at the plant; the sulfuric acid in the batteries is classified as an acutely hazardous material.

[End L33]

[Begin L34]

Page 4.9-5, last paragraph. In the last sentence, for accuracy, please delete "adversely" and replace "throughout the entire plant area" with "in areas of the plant".

[End L34]

[Begin L35]

Pages 4.9-6, 9, 11, and 13, Phase II testing. PG&E has now completed Phase II testing for all four plants. Risk Assessments have been completed for the Potrero, Contra Costa, and Pittsburg plants. A Risk Assessment is currently being prepared for the Geysers plant.

[End L35]

[Begin L36]

Page 4.9-17, paragraph 1. The Draft EIR states, "The appropriate lead agency at each plant will be selected by means of the Site Designation Process Under the Unified Agency Review of Hazardous Material Release Sites". It is likely that the lead agency for each plant will be selected by the Site Designation Process. However, other selection processes may be used to honor other processes and arrangements with local agencies in place at the time. PG&E recommends that in the quoted sentence, the words "will be" be replaced with "will likely be".

[End L36]

[Begin L37]

Page 4.9-19, paragraph 3. Please note that ammonia is not currently used in emissions abatement equipment at the power plants to be divested.

[End L37]

4.11 PUBLIC SERVICES

[Begin L38]

Page 4.11-16, paragraph 2. The Geysers Power Plant generates an estimated \$920,000 per year in property taxes to Lake County (not \$920,000 million).

[End L38]

4.12 UTILITIES AND SERVICE SYSTEMS

[Begin L39]

Page 4.12-3, transmission section, paragraph 2. Note the transmission corridor that serves San Francisco and the former Skyline District is rated at about 750 MW assuming the underground 230 kV cable is not available.

[End L39]

[Begin L40]

Page 4.12-5, last paragraph. Regarding the transmission lines, please delete the clause “to protect the in-city on-line generation from potential crippling damage”. The lines are automatically opened, not to protect generation, but to ensure service to the network load. The generators are equipped with their own underfrequency relays to protect them from damage.

[End L40]

[Begin L41]

Page 4.12-7, paragraph 2. (1) Note the CPUC is not served by the network load. (2) Please delete “and in BART trains under the bay”. While the BART stations are served by the distribution network, traction power to run the trains is served from a dedicated substation in San Francisco.

[End L41]

[Begin L42]

Page 4.12-7, paragraph 4. (1) Note that the SFOC require the Dispatcher to load San Francisco generation at differing percentages based on the load. At 800 MW required operating capacity, 40 percent is required; at 700 MW, 30 percent is required. The sentence could be corrected by replacing “40 percent” with “certain portion”. (2) In the paragraph’s last sentence, please delete “not”. During off-peak periods, the SFOC is intended to sustain some, if not all, of the much-reduced downtown loads.

[End L42]

[Begin L43]

Page 4.12-9, paragraph 1. Please delete the word “single”, as there are multiple lines between San Francisco and the outside power transmission grid.

[End L43]

[Begin L44]

Page 4.12-9, last paragraph. For accuracy in the first sentence, please replace “and replacement of 430 MVA transformers” with “and replacement with two 420 MVA transformers”.

[End L44]

5.0 CUMULATIVE IMPACTS

[Begin L45]

Page 5-11, paragraph 2. The section states that "PG&E is one of the key players in the Santa Rosa Wastewater Modified Geysers Recharge Project. However it is assumed that if PG&E were to sell its units, the new owners would simply assume PG&E's role in the process." These two sentences overstate PG&E's involvement with the project. PG&E is not a party to the contract signed by the City of Santa Rosa and Unocal-Thermal, nor has PG&E entered into separate agreements with the

steam suppliers as it did for the Southeast Geysers Pipeline Project. PG&E recommends deleting the two sentences.

[End L45]

6.0 ALTERNATIVES ANALYSIS

[Begin L46]

Please see the General Comment above regarding New Owners of the Geysers Geothermal Plant.

[End L46]

ATTACHMENT C: SYSTEM ECONOMIC AND OPERATIONAL CHARACTERIZATION

[Begin L47]

PG&E questions Attachment C's conclusion, and the underlying statements that lead to the conclusion, that new owners of the plants would tend to operate the plants at higher levels in the future than would PG&E. According to Attachment C's authors, three primary factors could influence increased generation: the portfolio effect, fuel procurement practices, and the ability of new owners immediately to participate in the direct access market. The discussions of these factors unfortunately contain inaccurate and speculative statements. However, PG&E recognizes that the resulting conclusion of increased generation is embedded as an assumption in many parts of the Draft EIR analyses and serves to further the conservative nature of the analyses. Thus, PG&E is choosing to not submit detailed comments on Attachment C. Please note that by accepting Attachment C's conclusion solely for the purpose of an assumption in the Draft EIR analyses that leads to increased generation, PG&E is not accepting Attachment C's statements, analyses, nor conclusions for any other purpose.

[End L47]

ATTACHMENT E: HAZARDOUS MATERIALS AND WASTE

[Begin L48]

Please see the comment for pages 2-44 and 45, Table 2.3.

[End L48]

ATTACHMENT F: GEYSERS POWER PLANT FACILITY LAYOUT MAPS

[Begin L49]

There are several minor inaccuracies on these maps. Please note that while the inaccuracies do not affect the EIR analyses or conclusions, these maps should not be relied on for purposes other than this EIR.

[End L49]

PROJECT APPLICANT

L. PACIFIC GAS AND ELECTRIC COMPANY

- L1 As discussed in Section 3.1 of the DEIR, due to the uncertainty involved in predicting future behavior of either PG&E or new plant owners, a conservative approach to the analysis in this EIR was employed. Such assumptions, as the commenter points out, “would result in the greatest potential for environmental impacts.” Given this, the DEIR may, in some instances, very well overestimate potential environmental impacts resulting from the project. This approach was necessary to ensure that, even if these environmental impacts were potentially overestimated, environmental effects identified would be evaluated and mitigated appropriately.
- L2 As discussed generally in response to Comment L1, the commenter points out specifically one of many conservative assumptions utilized in the analysis. The commenter is correct that this assumption (greatly reduced natural gas supply costs) further strengthens the conservative nature of the impacts analysis.
- L3 Comment noted.
- L4 “Greater coordination” as used in the instances described by the commenter extends beyond mere notification of events that might lead to steam stacking. The assumption of “greater coordination” for the environmentally preferable alternative was made for several reasons. First among those is a simple “common sense” determination: decision-making among two parties is more difficult than decision-making by one party, especially if the two parties in the former case have different corporate strategies and motivations. Second, the business relationship between PG&E and the steam field owners by all accounts has occasionally been adversarial in the past, and disputes among the parties continue. Third, the steam field operators have insisted that PG&E’s operations at the Geysers “promotes wasteful and inefficient use of fuel,” and that PG&E “has declined to make numerous investments and operating changes that would prolong resource life” at the Geysers (please see Comment P12). Thus, if the steam field owners were to purchase PG&E’s Geysers generating units, the fact that one entity would act to obtain maximum benefit from both the generating units and the steam fields would likely ensure greater coordination of steam field operations with generating unit operations, and would likely result in a greater overall benefit to the environment. For example, a single owner of both the steam field and the generating units may choose to bid into the Power Exchange (PX) at a price low enough to ensure some level of minimum generation at the Geysers, and thus avoid potential damage to the steam field resulting from shutting in the steam, even if the owner would lose money on the power sold during those times. By contrast, PG&E has operated its units based solely on benefits to its shareholders, and ceases operations the instant that continued generation becomes uneconomic, regardless of any potential damage to the steam field.

In addition, noted in Attachment C of the DEIR, the steam suppliers would face effective steam prices that are well below the off-peak PX prices because they would only have to

recover steam production costs, rather than the administered prices in the steam supply contracts. Therefore, they would be likely to cycle the Geysers plants less than PG&E currently does in response to fluctuations in demand and in PX market price. This would result in a greater capacity utilization of the Geysers units, which could reduce stacking and the unabated air emissions associated with stacking. Therefore, the DEIR conclusion that Alternative 3 is environmentally preferable to the proposed project is well founded.

It is important to note, however, that the DEIR concludes only that Alternative 3 “would allow for greater coordination of generating unit operations with steam field characteristics and may reduce steam stacking” (page 6-29, emphasis added), and does not state with certainty that Alternative 3 would definitely result in greater coordination or in reduced incidences of steam stacking. As well, the DEIR does not conclude that the operations of the generating units and steam fields are currently “not coordinated” as implied by the commenter, merely that having a single entity controlling both operations “allows for greater coordination.” Furthermore, the DEIR points out (on page 6-26) that the project itself “is not expected to have any adverse impacts with respect to steam stacking.” Thus, while Alternative 3 may provide environmental benefits in comparison to the existing setting (with PG&E owning the Geysers units), it would not alter or alleviate any significant environmental impacts associated with the project.

- L5 The determination that Alternative Three should represent the Geysers component of the environmentally superior alternative is not based solely on the level of operations of the Geysers units, but it is also based on the greater potential for coordination between the steam fields and the plants. Please see response to Comment L4 for the bases for conclusions with respect to Alternative 3.
- L6 Please see responses to Comments L4 and L5 with respect to the selection of the environmentally superior alternative. The DEIR notes in several locations that the steam field operators have the right of first refusal to purchase the Geysers Power Plant. It is also noted in the discussion of Alternative 3, on page 6-24 in the fourth full paragraph, second sentence.
- L7 The commenter is correct that CEQA does not require that the environmentally superior alternative be selected. As acknowledged on page 6-24 of the DEIR (fourth paragraph), it is not certain that the CPUC could order PG&E to sell its facilities to a particular buyer.
- L8 Comment noted.
- L9 Figure S.2 on page S-4 of the DEIR and Figure 2.1 on page 2-3 of the DEIR show only the status of the PG&E fossil-fueled power plants and the Geysers Power Plant. These figures do not show the location or status of other PG&E power plants, including 112 hydroelectric units, and the Diablo Canyon Nuclear Power Plant in San Luis Obispo County. The status of these other power plants is discussed in the DEIR in the last paragraph on page S-5.

L10 Page S-5 (third paragraph, second sentence) is hereby amended as follows:

PG&E will retain facilities and equipment at each site that pertain to transmission or distribution operations with the exception of a small portion of the transmission lines at the Geysers Power Plant.

Please note that the DEIR already states (on page 2-7, first paragraph) that PG&E will divest its 21-kV distribution and 4-kV service lines at the Geysers plant.

L11 The commenter is correct. Although the effect of both types of agreements is to prevent future residential use (or other sensitive uses) of the property, the legal mechanisms would vary, as noted by the commenter. Page S-5 of the DEIR (third paragraph, fifth sentence) is hereby amended as follows:

The Purchase and Sale agreement for each of the fossil-fueled plants requires a deed restriction that prevents the new owner from using the site for residential or other sensitive uses. The same restriction will be created on the Geysers Power Plant transfers by means of a land use covenant whereby the purchaser (and its subsequent transferees, if any) agrees not to use the property for residential or other sensitive land uses.

Similarly, page 4.1-13 of the DEIR (first paragraph under Impact 4.1-1, second and third sentences) is hereby amended as follows:

As a result, the new power plant owners would be subject to local environmental permits (e.g., water and air quality), and local land use agreements (e.g., easements, ~~and deed restrictions,~~ and covenants). Furthermore, PG&E's Purchase and Sale Agreement for each of the fossil-fueled plants will require a deed restriction that prevents development of residential and other sensitive uses on the site, while the buyers of the Geysers plants will be required to sign a land use covenant, which would transfer to any future owners, prohibiting residential and other sensitive uses of the property.

L12 Page S-21 (Impact 4.5-4, significance level for proposed project) is hereby amended as follows:

NS(M)

Page S-21 (Impact 4.5-5, significance level for proposed project) is hereby amended as follows:

S/UN(M)

In addition, the following definition is added to footnote “a” of Table S.6 (all pages), following the definition for S/UN:

S/UN(M) = Impact is significant and unavoidable; mitigation is identified to reduce the impact, but not to less-than-significant levels.

Page S-23 (Impact 4.9-3, significance level for proposed project) is hereby amended as follows:

NS(M)

L13 Page 2-5 of the DEIR (first complete paragraph, last sentence) is hereby amended as follows:

PG&E is currently considering the divestiture various options for market valuation of its hydroelectric assets.

L14 Page 2-20 of the DEIR (second paragraph, third sentence) is hereby amended as follows:

Two All three of the three boilers associated with Units 5, 6 and 7 are also capable of burning residual fuel oil.

L15 Page 2-42 of the DEIR (second paragraph, second sentence) is hereby revised to reflect PG&E’s updated estimate of improved capacity from the Southeast Geysers effluent pipeline:

There has been a 7 5 percent (60 40 MW) increase in capacity in the Southeast Geysers field as reported by staff at the Geysers Power Plant PG&E (PG&E Comments to DEIR, September 21, 1998, page 4).

L16 In order to reflect PG&E’s clarification, Table 2.3 is revised to indicate that the Contra Costa plant does require an SLC Marine Terminal/Public Lands Lease. See response to Comment BX1. Note (b) in Table 2.3 is amended as follows:

Applies only to Administration Center and Operations Center at the Geysers Power Plant. The Aboveground Petroleum Storage Tank requirement applicable to the Geysers plant is not a permit per se. The requirement includes a biannual statement, registration fee, and SPCC plan.

L17 The following text is added to the end of the first paragraph on page 4.4-5 of the DEIR.

The sodium hypochlorite is neutralized with sodium bisulfate before discharge, in accordance with the NPDES permits.

- L18 Page 4.5-14 of the DEIR (third paragraph, third sentence) is hereby amended and a fourth sentence is added as follows:

Since the beginning ~~end~~ of 1994, use of fuel oil at these plants has ended and, in response to BAAQMD Regulation 9, Rule 11, only natural gas is burned in these plants. However, fuel oil may still be used in limited circumstances such as *force majeure* natural gas curtailment and very limited testing, per BAAQMD Regulation 9, Rule 11.

- L19 Page 4.5-24 of the DEIR (second paragraph, third sentence) is hereby amended as follows:

Unit 3 is coupled to a single boiler, which is capable of burning natural gas or fuel oil; however, since ~~1995~~ 1994, PG&E has only burned natural gas. As previously discussed, burning fuel oil is now prohibited by ~~has been burned because of~~ Regulation 9, Rule 11 (promulgated by BAAQMD in 1997), except under *force majeure* natural gas curtailment and during limited testing.

- L20 Page 4.5-34 of the DEIR (fifth paragraph, second sentence) is hereby amended as follows:

...include lube oil and distillate storage tanks, a gasoline dispensing facility, boiler standby equipment (distillate fire engine ~~and mobile combustion turbine~~), solvent cleaning operations, maintenance coating operations, a wastewater treatment facility, sandblasting, and miscellaneous sources.

- L21 Page 4.5-39 of the DEIR (last paragraph, last sentence) is hereby amended to read:

While ~~two of~~ the seven boilers are permitted to burn either natural gas or fuel oil, all of them currently burn only natural gas (because of restrictions in BAAQMD Regulation 9, Rule 11).

- L22 Please see response to Comment T7.

- L23 The EPA recognizes that there is uncertainty in emissions measurements of particulate matter, and it is still unclear how much of the fraction should actually be considered. The older emission factors, which usually did not include the condensable fraction, may have underestimated the actual emission factor. Since the condensable fraction may eventually become particulate matter in the atmosphere, EPA policy has been to include the condensable fraction. However, there is no indication on what fraction of the condensable portion would actually become particulate matter in the atmosphere. Thus, including all of the condensable fraction may be a conservative over-estimate of particulate matter emissions from these boilers.

- L24 Page 4.7-30, paragraph 3, of the DEIR is hereby amended as follows:

In order to obtain take authorization under FESA, PG&E has submitted an application to USFWS and NMFS for Section 10 Permits. The HCP and draft

Implementing Agreements between PG&E and the federal agencies were included in this application. In response to comments from the USFWS and NMFS, PG&E has slightly revised the HCP incorporated in the CESA MOU. The revised draft HCP (dated April 22, 1998) and associated permit application documents have been submitted to reviewed and deemed completed by USFWS and NMFS staff in June 1998. Based on PG&E's discussion with USFWS and NMFS, the federal agencies ~~intend to adhere to~~ concur with a timeline under which the availability of the draft HCP and draft Environmental Assessment for the Section 10 Permits will be noticed in the Federal Register in July September 1998. ~~This will initiate a~~ A formal 30-day public review and comment period was held. Comments received during the formal review period will be addressed in a final HCP. According to the ~~staff proposed~~ staff proposed timeline, the Section 10 Permits will be issued by ~~October~~ the end of 1998.

L25 Please see response to Comment L24.

L26 The following sentence is hereby added to page 4.7-31 of the DEIR at the end of the second bullet point:

The funding will be maintained in a special deposit account;

L27 Page 4.7-35, third paragraph, of the DEIR is hereby amended as follows:

PG&E has taken steps to ensure that the new owner will be the holder of the CESA MOU and the Section 10 Permits at the closing of the sale of the Pittsburg and Contra Costa Power Plants. The CESA MOU includes provision for transfer of the CESA MOU to the new owner. NMFS and USFWS have agreed to work with PG&E and the new owner to reissue the Section 10 Permits to the new owner on an expedited basis. In addition, the draft Implementing Agreement outlines the process proposed by NMFS legal counsel for the reissuance of the Section 10 Permits ~~and transfer of the draft, including the related Implementing agreement Agreement and HCP to the new owner~~. Section 13 currently provides that upon the new owner satisfying specified conditions, the federal agencies will use their best efforts to issue new permits within 60 days of receipt of a complete application for permit reissuance. ~~USFWS has proposed revisions to the language drafted by NMFS, and therefore the language of Section 13 is still subject to change. Nevertheless, USFWS legal counsel has indicated to PG&E that a reissuance of the Section 10 Permits to the new owner can be accomplished within a 60-day period~~ The USFWS has concurred with this expedited timeline. Accordingly, if the Section 10 Permits are issued to PG&E and the new owner applies for permit reissuance at least 60 days prior to or at closing, the permits should be reissued to the new owner at closing, and the new owner will be subject to the restrictions of such permits and the CESA MOU upon the closing of the sale to the same extent PG&E would have been.

L28 Please see response to Comment L27.

L29 Please see response to Comment L27.

L30 Page 4.7-36, third paragraph, of the DEIR is hereby amended as follows:

~~As a condition of closing the sale~~If the Section 10 Permits have been reissued to PG&E prior to closing, the new owner will be required to ~~obtain~~seek the reissuance of the Section 10 Permits issued to PG&E, and accept the permittee's obligations under the CESA MOU, the HCP and the Implementing Agreements. If the permits have not been issued to PG&E, the new owner will be required to resubmit and accept any obligations under, PG&E's pending applications for the Section 10 Permits, including the resubmittal of the then-current draft Implementing Agreement and HCP, and will seek to obtain such permits on substantially the same terms and conditions as were contained in PG&E's permit applications.

L31 As the timing requirement associated with Mitigation Measure 4.7-2 is currently written, documentation verifying that plant managers have received copies of the commitments to the pertinent obligations must be submitted to the CPUC at least 40 days before the transfer of title. No change is deemed necessary.

L32 Page 4.7-37, under the heading "Level of Significance after Mitigation," of the DEIR is hereby amended as follows:

If the Section 10 Permits are not issued to the new owner prior to or at closing, the project may result in an unauthorized taking of listed species. The new owner's commitment to obtain the permits and to comply with the ~~Operational~~operational Constraints~~constraints in PG&E's Section 10 Permits and the HCP~~ during the interim period before they are issued will reduce this impact to less than significant.

L33 Page 4.9-4 of the DEIR (last sentence at bottom) is hereby revised as follows:

With the exception of the sulfuric acid contained in lead-acid batteries, no acutely hazardous materials are used or stored at the Potrero Power Plant.

L34 Page 4.9-5 of the DEIR (last sentence at bottom running to top of next page) is hereby revised as follows:

According to information provided in the study, operations during the site's use as an MPG have ~~adversely~~ impacted the groundwater and soil in areas of the plant.~~throughout the entire plant area.~~

L35 Pertinent information presented in the Phase II Environmental Site Assessments is summarized in the responses to Comment F33 and Comment T10, and in the staff-initiated text changes in Chapter 4 of this document.

L36 PG&E states that while the appropriate lead agency for cleanup at each plant would be selected by means of the "Site Designation Process Under the Unified Agency Review of

Hazardous Material Release Sites” (as is described on page 4.9-17 of the DEIR), other selection processes might be used to honor arrangements with local agencies that might already be in place.

Page 4.9-17 of the DEIR (paragraph 1, second complete sentence) is hereby revised as follows:

The appropriate lead agency at each plant will likely be selected by means of the Site Designation Process Under the Unified Agency Review of Hazardous Material Release Sites (California Environmental Protection Agency, 1997).

L37 Page 4.9-19 of the DEIR (second bulleted paragraph, first sentence) is hereby revised as follows:

Ammonia (typically dissolved in water as NH_4OH) has been is used in the past in emissions abatement equipment, but is no longer used.

The following sentence is added to the end of second bulleted paragraph on page 4.9-19 of the DEIR:

Ammonia is not currently used in emissions abatement equipment at the power plants to be divested.

L38 Please see response to Comment N51.

L39 Page 4.12-3, sixth paragraph, first sentence, is hereby amended as follows:

The transmission corridor serves San Francisco and the former Skyline District (in both San Francisco and San Mateo County Counties) loads (i.e., the aggregate demand for electricity from inhabitants of these areas) and is rated about ~~730~~ 750 MW.

L40 Page 4.12-5, last paragraph, first sentence, is hereby amended to read:

...San Mateo Substation are automatically opened at the Martin Substation to ensure service to the network load.~~to protect the in-city on-line generation from potential crippling damage.”~~

L41 Page 4.12-7, first full paragraph, first sentence, is hereby amended to read:

The network load includes City Hall, PG&E headquarters, ~~the CPUC~~, BART and Municipal transit loads, and many of the skyscrapers of the financial district. Many of these loads cannot be interrupted, even momentarily, without possible significant health and safety impacts (e.g., trapping people in elevators ~~and in BART trains under the bay~~), and too, it may prove a difficult and lengthy task to re-energize this older non-radial network.

- L42 The commenter is correct that the percentage of the downtown load required to be served by San Francisco Peninsula generation varies with load. Also, the smaller amount of Peninsula generation required to be on line during the off-peak period will support some of the downtown load.

The second sentence in the third full paragraph on page 4.12-7 of the DEIR is hereby amended as follows:

The SFOC require the System Dispatcher to load the San Francisco generation at the Potrero and Hunters Point Power Plants to supply a significant share (the exact percentage varies with demand)~~40 percent~~ (PG&E, 1994) of the San Francisco load during all peak and partial peak hours.

The fifth sentence in the third full paragraph on page 4.12-7 of the DEIR is hereby amended as follows:

During off-peak periods, the SFOC ~~is not intended to sustain even the much-reduced downtown loads~~ dictates that about 80 MW of Peninsula generation must be online and dispatched. In case of a disturbance, this dispatched generation would serve to instantaneously support a portion of the downtown load.

- L43 The commenter seeks to clarify the point that in fact there are multiple lines between San Francisco and the outside power grid versus a single line. The commenter is correct that there are multiple transmission lines providing power to San Francisco. While the DEIR text mentioned a single interconnection which, in actuality, contains multiple lines, it is also true that this single interconnection is San Francisco's only electric link to the outside grid. However, in the interest of clarity, page 4.12-9 of the DEIR, first full sentence, is hereby amended to read:

Additionally, without in-city generation, given the transmission configuration, there would be a citywide blackout if and when the ~~single~~ interconnection between San Francisco and the outside power transmission grid were lost.

- L44 Page 4.12-9, last paragraph, first sentence, is hereby amended to read:

PG&E has just completed installation of shunt capacitors at the Metcalf Substation near south San Jose and during June 1998, and began replacement of two, approximately ~~100~~ 120 MVA (MegaVolt-Amperes) 230 to 115 kV transformers with two 420 MVA transformers at the San Mateo Substation ~~and replacement of 430 MVA transformers.~~

- L45 The commenter is correct that the text on Page 5-11, paragraph 2 overstates PG&E involvement in the Santa Rosa Wastewater Modified Geysers Recharge Project. Page 5-11, the first full paragraph is hereby amended to delete the first two sentences as follows:

~~PG&E is one of the key players in the Santa Rosa Wastewater Modified Geysers Recharge Project. However, it is assumed that if PG&E were to sell its units, the new owners would simply assume PG&E's role in the process. The potential increase in steam production...~~

L46 Please see responses to Comments L4 through L7.

L47 The commenter is correct that the conclusions of Attachment C “further the conservative nature of the analyses” in the EIR. All statements in Attachment C have been checked to the extent possible for accuracy and to minimize any speculation. As with other portions of the EIR, where judgements needed to be made concerning the future behavior of PG&E and of new owners of the plants proposed for sale, the EIR preparers chose assumptions that would avoid any potential for underestimating the changes effected by divestiture and their corollary environmental impacts.

L48 Please see response to Comment L16.

L49 Comment noted.