

## **APPENDIX E**



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May 4, 2004

Mr. Terry M. Winter  
President and CEO  
California Independent System Operator  
151 Blue Ravine Road  
Folsom, California 95630

Subject: Retirement of Hunters Point Power Plant

Dear Mr. Winter:

On April 15, 2004, several PG&E representatives and I had a productive discussion with CAISO management concerning the retirement of Hunters Point Power Plant (HPPP). Thank you for the time you and your staff have dedicated to address this issue.

Pacific Gas and Electric Company is committed to the closure of HPPP. We share the CAISO's objective of doing so in a manner that ensures system reliability. PG&E believes completion of the transmission projects listed in the attachment will resolve all applicable reliability and operational requirements without any generation at HPPP regardless of the schedule for construction of new generation in San Francisco.

The transmission projects listed in the attachment essentially mirror transmission projects listed in your October 22, 2003 letter to Supervisor Maxwell. The first six projects on the list are designed to meet CAISO planning criteria and load serving capability requirements. As concluded in the CAISO's July 2003 "San Francisco Peninsula Load Serving Capability Report" and PG&E's August 2003 "San Francisco Internal Transmission System After AP-1 Technical Study Report," the completion of these projects would enable the electric grid to serve up to 992 MW of peak demand in San Francisco and 1,114 MW in the Peninsula. For comparison, the recorded 2003 peak demand in San Francisco and the Peninsula were 907 MW and 970 MW, respectively after weather normalization to a 1-in-10 year high temperature. With electric demand projected to grow at about 1.5%, the electric grid is expected to be adequate for at least the next five to ten years. Beyond that, other transmission projects in PG&E's grid expansion plan will provide the needed capacity.

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The next two projects on the list are the Tesla-Newark No. 2 and Ravenswood-Ames Projects. These projects are designed to address Reliability Must Run (RMR) contract requirements in the Greater Bay Area. As stated in your October 2003 letter to Supervisor Maxwell, these two projects are very effective in reducing Greater Bay Area RMR requirements. Consequently, the completion of these two projects will reduce the amount of Greater Bay Area RMR requirement to the point that generation at HPPP is no longer needed.

The last on-going project on the list will replace insulators on the San Mateo 230 kV bus and eliminate the need to wash them during summer months. This San Mateo bus wash has been an operational challenge and was described in your October 2003 letter to Supervisor Maxwell. The completion of the insulator replacement work will eliminate the need for the bus wash and reduce the stated 400 MW generation operational requirements to less than 200 MW; a requirement well within the capability of existing generation north of San Mateo substation excluding all generation at HPPP.

PG&E continues to work to address a couple of remaining CAISO staff questions about reliability and RMR issues involving HPPP. First, in July 2003, PG&E requested the CAISO clarify its Greater San Francisco Bay Area Generation Outage Standard to be consistent with industry standards for localized systems within the Bay Area. Since that time, the CAISO convened its Reliability Planning Standard Committee to review the interpretation and application of the Standard. In an April 2004 draft, the Committee recommends that this standard not be applied to local areas such as the 115 kV internal cables within San Francisco. This recommendation is consistent with PG&E's interpretation and industry standards. PG&E has based its conclusion that all reliability requirements can be met without generation at HPPP on this interpretation. PG&E looks forward to the CAISO's final resolution and response to our request for clarification.

In addition, PG&E has analyzed the RMR contract costs for HPPP Unit 1 following termination of the RMR contract for HPPP Units 2, 3 and 4. Since the fixed costs of maintaining the site and operating the plant (formerly spread over four generating units) would be assigned only to Unit 1, the annual RMR cost of HPPP Unit 1 is expected to increase from less than \$1 million to as much as \$8 million per year. Because of its substantially higher cost, HPPP Unit 1's RMR contract should be terminated and the entire HPPP allowed to be retired.

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Timely completion of the projects in progress is critical to implementing PG&E's plan. Both the Jefferson-Martin and the Hunters Point-Potrero projects require action by the California Public Utilities Commission (CPUC). PG&E appreciates CAISO staff support to date on these projects at the CPUC and looks forward to continued cooperation in its efforts to secure the necessary approvals.

In conclusion, PG&E has completed or is in the process of implementing transmission projects that meet all reliability requirements for San Francisco, northern San Mateo County and the Greater Bay Area. We believe we have addressed all remaining issues and plan to retire all of the generation at HPPP shortly after completion of the listed transmission projects. Please let me know if you agree with PG&E's conclusions concerning the retirement of HPPP. If the CAISO disagrees, I would appreciate knowing what specific additional transmission and/or operational solutions the CASIO feels are necessary to retire all units of HPPP and the basis for proposing any such solutions.

Thank you for your attention to this matter. We look forward to working with you.

Sincerely,

  
JEFFREY D. BUTLER

cc: Tom King (PG&E)  
Randy Abernathy (CAISO)  
Bob Harris (PG&E)  
Karen Tomcala (PG&E)  
Jack Broadbent (BAAQMD)  
Rich Cashdollar (CAISO)  
Kevin Dasso (PG&E)  
Jim Detmers (CAISO)  
Randy Livingston (PG&E)  
Armie Perez (CAISO)

Attachment

**Transmission Work PG&E Pursuing  
To Meet CAISO Planning Requirements, Reduce Reliability  
Must Run Contract Costs and Retire Hunters Point Power Plant**

	<b>Transmission Project</b>	<b>Estimated Completion Date/Status</b>	<b>Capacity Increase</b>	<b>Issue</b>	<b>Resolution of Issue</b>
1	San Mateo-Martin No. 4 Line Voltage Conversion	July 2004, Under Construction	135 MW	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
2	Potrero Static Var Compensator	December 2004, Under Construction	340 MVAR	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
3	Jefferson-Martin 230 kV Line	December 2005, Pending CPUC Permit Approval	400 MW	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
4	Potrero-Hunters Point (AP-1) 115 kV Cable	December 2005, Pending CPUC Permit Approval	200 MW	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
5	Ravenswood 2 <sup>nd</sup> 230/115 kV Transformer Project	May 2004, Under Construction	420 MW	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
6	San Francisco Internal Cable Higher Emergency Ratings	Complete, CAISO Reviewed & Supports Ratings	Varies	CAISO Planning Standards	This project in combination with the other listed projects allows PG&E to meet planning requirements with HPPP retired
7	Tesla-Newark No. 2 230 kV Line Reconductoring	May 2005, Engineering	220 MW	RMR Criteria	This project reduces RMR requirements in the Greater Bay Area to the point that generation at HPPP is no longer needed
8	Ravenswood-Ames 115 kV Lines Reinforcement	May 2005, Engineering	258 MW	RMR Criteria	This project further reduces RMR requirements especially RMR energy dispatch to the point that generation at HPPP is no longer needed
9	San Mateo 230 kV Bus Insulator Replacement	May 2005, Engineering	Operation Flexibility	Operations Requirement During San Mateo Bus Wash	Eliminate bus wash at San Mateo 230 kV bus would reduce the CAISO's stated 400 MW generation operational requirement down to less than 200 MW

**Transmission Projects PG&E Completed Since 2001 that Maintain and Improve  
Reliability in San Francisco, Northern San Mateo County and the Greater Bay Area**

	<b>Transmission Project</b>	<b>Date Completed</b>	<b>Capacity Increase</b>	<b>Description of Work</b>
A	Belmont-Bair 115 kV Line	2/13/2001	16 MW	Increase rating by applying a higher wind speed assumption
B	Martin 115 kV Capacitor Project	4/28/2001	150 MVAR	Add 150 MVAR of 115 kV capacitor in San Francisco to increase voltage support
C	Tesla-Newark No. 2 230 kV Line	5/7/2001	600 MW	Construct a new 230 kV line from Tesla to Newark and add 600 MW of transfer capability to the Bay Area
D	Ravenswood 230 kV Loop	6/3/2001	100 MW	Loop the Newark-San Mateo 230 kV line into Ravenswood Substation
E	Metcalf 500 kV Capacitor	6/3/2001	350 MVAR	Install 350 MVAR of 500 kV capacitor at Moss Landing to increase voltage support to the Bay Area
F	Tesla 500/230 kV Transformer	6/3/2001	1122 MW	Install a 1,122 MVA 500/230 kV transformer at Tesla
G	San Mateo-Martin 115 kV Line Upgrade	4/28/2002	93 MW	Reconductor the underground portion of the San Mateo-Martin Nos. 2, 3 and 6 115 kV lines
H	Potrero 115 kV Capacitor	6/17/2002	150 MVAR	Install 150 MVAR of 115 kV capacitor at Potrero to increase voltage support to the Bay Area
	San Mateo-South Transmission	7/22/2002	147 MW	Establish a second Ravenswood-Bair 115 kV circuit and other modifications at Ravenswood and Bair substations
J	Newark-Ravenswood 230 kV Line Rerate	11/26/2002	150 MW	Increase line rating by applying a higher wind speed assumption
K	Ravenswood-San Mateo 230 kV line Reconductoring	12/13/2002	460 MW	Upgrade station equipment of the Ravenswood-San Mateo No. 1 230 kV line and reconductor the No. 2 line
L	Ravenswood-San Mateo 115 kV Line Rerate	3/25/2003		Increase line rating by applying a higher wind speed assumption
M	Metcalf 500/230 kV Transformer	5/24/2003		Install transformer at Metcalf
N	Metcalf 230/115 kV Transformer	5/31/2003	420 MW	Install transformer at Metcalf
O	Tesla-Newark No. 2 Line Rerate	4/18/2003	100 MW	Increase line rating by applying a higher wind speed assumption



# CALIFORNIA ISO

California Independent  
System Operator

**RECEIVED**  
**JEFF BUTLER**

JUL 07 2004

Jim Detmers  
Vice President, Grid Operations

July 1, 2004

*Via Facsimile and US Mail*

The Honorable Gavin Newsom, Mayor of the City and County of San Francisco  
Ms. Sophie Maxwell, City and County of San Francisco Board of Supervisors  
Mr. Jeffrey D. Butler, Pacific Gas and Electric Senior Vice President, Transmission and Distribution  
Mr. Ralph Hollenbacher, San Francisco Public Utilities Commission

Subject: Shutting Down Generation At the Hunters Point and Potrero Power Plants

Dear Mayor Newsom, Ms. Maxwell, Mr. Butler, and Mr. Hollenbacher:

The California Independent System Operator Corporation ("ISO") has received letters from each of you concerning the shut down of generation at Hunters Point Power Plant ("Hunters Point") and Potrero Power Plant ("Potrero"). Because the questions being asked are similar, the ISO has taken the liberty of addressing all of the questions in this letter.

Over the past several years, ISO staff has spent a great deal of time and effort working with the City and County of San Francisco ("City"), Pacific Gas and Electric Company ("PG&E"), and many members of the Potrero and Hunters Point/Bayshore communities ("Parties") to address concerns and questions related to the need for generation at Hunters Point and Potrero. The ISO recognizes that there are wide-ranging interests regarding the future of generation at the Hunters Point Power Plant and the Potrero Power Plant and that the concerns and issues voiced by all stakeholders are an important part of deciding how best to serve the demand for energy in San Francisco. The ISO also believes that all parties share a common goal of providing the City<sup>1</sup> with reliable, secure and environmentally responsible electric service and that, although complex, resolving the issues that constrain the retirement of generation in San Francisco is obtainable over time. To this end, the ISO remains fully committed to supporting the City and PG&E in successfully achieving their goals while maintaining the reliability needs of the entire San Francisco Peninsula Area.

On April 15, 2004, ISO and PG&E representatives met to discuss the retirement of Hunters Point and the transmission upgrades necessary to allow the ISO to discontinue extending the Reliability Must Run ("RMR") Agreement for any of the Hunters Point units. ISO staff has worked closely with PG&E to make sure that all load serving capability, RMR, and operational reliability issues have been appropriately identified and addressed in PG&E's 2003 transmission expansion plan. In addition, PG&E informed the ISO that it intends to move forward with replacing the insulators on the San Mateo 230kV bus to eliminate the need to perform required maintenance washes during the summer months. This decision resolves the final operational reliability issue that, based on current studies, required the continued operation of Hunters

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<sup>1</sup> In the testimony for the Jefferson-Martin Transmission Line, currently before the California Public Utilities Commission, the ISO refers to the City and County of San Francisco and the San Francisco Peninsula as the "San Francisco Peninsula Area." For clarity in this letter, the ISO will delineate separately, when necessary, the City, the Peninsula, and the Greater Bay Area even though the City is included in the Peninsula, which is included in the Greater Bay Area.

Point Unit 1 beyond 2005. Therefore, based on PG&E's completion of the 2003 Transmission Expansion Plan items outlined in your May 4, 2004 letter prior to the end of 2005 and the other critical assumptions listed below, the ISO anticipates being able to discontinue renewing the RMR Agreement for Hunters Point Units 1, 2, 3, and 4 for 2006.

As stated in their May 4, 2004 letter, PG&E shares the ISO's commitment to retiring Hunters Point in a manner that assures adequate load serving capability and system reliability. And while the ISO and PG&E are in agreement on what is needed to remove the Hunters Point facilities from their RMR designations at the end of 2005, this agreement is predicated upon the expectation that the retirement of these units will not unduly jeopardize reliable electric service to PG&E's customers in the City and the San Francisco Peninsula Area. Put another way, the ISO's support for retiring generation in the City is based on certain "critical assumptions" that are reasonably expected to occur. Of significant importance is the successful retrofit of Potrero Unit 3 with selective catalytic reducers. Retrofitting Potrero 3 has constituted a "critical assumption" in all conclusions that the ISO has presented to the parties today and in all previous ISO correspondence. Reiterating previous statements, the ISO has not studied or prepared scenarios without Potrero Unit 3 in place. Therefore, it should be clearly understood that the technical conclusions that allow for the retirement of generation at Hunters Point would be altered should Potrero Unit 3 not be able to operate beyond 2005. Notwithstanding the continued operation of Potrero Unit 3, other "critical assumptions" such as an accelerated increase in local area load growth, the unexpected retirement and/or failure of other local area generation in the Greater Bay Area, and/or the unexpected failure of critical elements of the transmission system that supports the City and San Francisco Peninsula Area, among others, would also have an impact on the ISO's technical conclusions that allow for the ISO to discontinue renewing the RMR Agreement for Hunters Point. While changes in these "critical assumptions" are uncontrollable, the ISO remains committed to work with PG&E to retire the Hunters Point facility by the end of 2005. It is anticipated that the ISO Board will make the final decision at its September 2005 meeting.

Of particular concern to the ISO is the timely completion of the Jefferson – Martin 230kV Transmission Project and the inability of Hunters Point Unit 4 to operate beyond 2005 due to Bay Area Air Quality issues. Even though PG&E clearly remains dedicated to completing this project on time, a reasonable probability still remains that Jefferson – Martin could be delayed until sometime in 2006. As the ISO stated in its October 22, 2003 letter to Supervisor Sophie Maxwell, securing the necessary interchangeable emission reduction credits ("IERC") to operate Hunters Point Unit 4 beyond 2005 is the responsibility of PG&E as the plant owner. In PG&E's direct testimony regarding the need for the Jefferson – Martin 230kV Transmission Project submitted to the Public Utilities Commission of the State of California, PG&E correctly acknowledged that the ISO would require PG&E to delay closure of Hunters Point until the Jefferson – Martin 230kV Transmission Project becomes operational.<sup>2</sup> Based on this testimony, it is the ISO's understanding that PG&E will take the required steps to secure the necessary IERCs to operate Hunters Point Unit 4 beyond 2005 should the need arise. The ISO believes this to be a prudent and necessary step to assure that San Francisco area reliability can be sufficiently maintained should the operation of Jefferson – Martin be unavoidably delayed.

On May 28, 2004 the ISO received a letter from Gavin Newsom, Mayor of San Francisco and Sophie Maxwell, Member of the Board of Supervisors asking for the ISO's continued assistance in helping the City plan for cleaner, more reliable and more efficient electric resources. The May 28, 2004 letter posed several

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<sup>2</sup> Direct Testimony of Pacific Gas and Electric Company Regarding Need for the Jefferson-Martin 230 kV Transmission Project, A.02-09-043 (Oct. 10, 2003), at p. 85-86.



questions that relate to generation facilities at Hunters Point and Potrero. These questions are restated below in italics followed by the ISO's answer.

*The City seeks a commitment by the ISO to release Hunters Point Units 1 and 4 from any RMR obligations no later than December 2005.*

As stated above, based on PG&E's commitment to successfully complete the 2003 Transmission Expansion Plan items outlined in their May 4, 2004 letter, the ISO is in agreement with PG&E concerning the retirement of Hunters Point Power Plant. Assuming that these facilities are in operation prior to the end of 2005 and the other critical assumptions listed above allow the ISO to discontinue renewing the RMR Agreement for Hunters Point, the ISO would not renew the RMR Agreement for Hunters Point Units 1 and 4 for 2006. It is anticipated that the ISO Board at its September 2005 meeting will make the final decision.

Q1b) *The City seeks confirmation from the ISO that it will release Hunters Point Units 1 and 4 from any RMR obligations on completion of the transmission projects identified in the attachment to PG&E's May 4, 2004 letter.*

See A1a.

*The City seeks a commitment by the ISO to release Hunters Point Units 1 and 4 from any RMR obligations provided that three turbines are connected to the internal San Francisco 115 kV transmission network and the eight transmission projects identified in your October 22, 2003 letter (which excludes Jefferson-Martin) are completed.*

Assuming the installed capacity of the City's three new combustion turbines is 145 MW, the information stated in the ISO's October 22, 2003 letter to Supervisor Maxwell and the matrix provided to the City in February 2004, is correct through 2006. Providing the transmission projects identified in these documents are in operation prior to the end of 2005 and the other critical assumptions listed above allow the ISO to discontinue renewing the RMR Agreement for Hunters Point, the ISO would not renew the RMR Agreement for Hunters Point Units 1 and 4 for 2006. It is anticipated that the ISO Board at its September 2005 meeting will make the final decision.

Q2) *The City would like to ensure the closure of all existing generation at Potrero as soon as possible. PG&E's May 2, 2004 letter suggests that this should be possible in the near future. PG&E's May 2, 2004 letter indicates that with the Jefferson-Martin and other transmission project set forth in the attachment to the letter, only 200 MW of generation would be needed north of San Mateo substation. If this is correct, the ISO should be able to release all existing Potrero units from any RMR obligation once 1) Jefferson-Martin and the other transmission project identified by PG&E are completed, 2) Hunters Point is closed, and 3) three new turbines at Potrero and a fourth turbine at the Airport are placed in service. Please confirm that this is correct. If this is not correct, please 1) explain why not, 2) detail which units at Potrero Power Plant could be released of any RMR obligations in this scenario, and 3) describe what additional resources or load reduction would be required to provide for the release of all of the Potrero Power Plant units from any RMR obligations.*

A2) As stated above and in the ISO's October 22, 2003 letter to Supervisor Maxwell, the ISO has not fully studied what grid enhancement would be necessary to enable the retirement of Potrero Unit 3.

Accordingly, the ISO is not prepared to provide an answer to this question at this time. However, the ISO recognizes the importance and significance the Potrero community and the City confers to the retirement of Potrero Unit 3 at the earliest possible time and remains committed to continue meeting with Potrero community group leaders to discuss the future need for Potrero 3. In order to address the lack of a plan to retire Potrero Unit 3 and in the spirit in which the ISO has committed to proactively work with the Potrero community group leaders, the ISO proposes to immediately begin working with the Potrero community group leaders, the City, and PG&E to develop a plan that would allow the ISO to discontinue renewing the RMR Agreement for Potrero Units 3, 4, 5, and 6 and that this effort be coordinated with the ongoing work that is currently being undertaken by the San Francisco Stakeholder Study Group.

I have endeavored to provide as complete an explanation as possible to the questions posed from all of you, at least based upon the information known today. As mentioned, we remain sincerely committed to work with you and affected communities to reach our mutual goal to obtain a reliable, affordable and environmentally responsible energy future. If you have any questions, please call Julie Gill at (916) 351-2221 or Gary DeShazo at (916) 608-5880.

Sincerely,



Jim Detmers  
Vice President, Grid Operations  
Acting Chief Operations Officer

Attachments

Cc:  
Jesse Blout, City and County of San Francisco  
Steve Huhman, Mirant  
Armando J. Perez, ISO  
Gary DeShazo, ISO  
Julie Gill, ISO