

January 29, 2010

Mr. Michael R. Peevey Commission President California Public Utilities Commission 505 Van Ness Avenue, San Francisco, CA 94102 **Thomas E. Bottorff** Senior Vice President Regulatory Relations US Mail: Mail Code B32 Pacific Gas and Electric Company P. O. Box 770000 San Francisco, CA 94177-0001

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Re: PG&E's Response to Letter from President Peevey, dated June 25, 2009, regarding California Energy Commission (CEC) Assembly Bill 1632 Report Recommendations

Dear Mr. Peevey:

By letter dated June 25, 2009, from President Peevey to Peter Darbee, PG&E was directed to include in its Diablo Canyon Power Plant (Diablo Canyon or DCPP) license renewal application filed with the Commission pursuant to Decision 07-03-044, responses to certain recommendations made by the California Energy Commission's Report, "An Assessment of California's Nuclear Power Plants: AB 1632 Report" (AB 1632 Report) issued November 2008.

PG&E responded, in part, to many of the AB 1632 Report recommendations in its response to data requests of the California Energy Commission (CEC), dated July 22, 2009. PG&E provides a copy of this data request response as Attachment 1.

Some of the information is also addressed in an application PG&E filed simultaneously today with the Commission, which requests cost recovery associated with renewal of the Diablo Canyon operating licenses (license renewal application). For these responses, PG&E provides the specific reference to the prepared testimony supporting the license renewal application where the responsive information can be found. PG&E's full responses are provided below.

1. Report on the major findings and conclusions from Diablo Canyon's seismic/tsunami studies, as recommended in the AB 1632 Report (pp. 6, 7, 10 and 13), as well as studies that are directed by any subsequent legislative mandates, and report on the implications of these findings and conclusions for the long-term seismic vulnerability and reliability of the plant.

Attachment 1, Section F (pp. 14-22) addresses PG&E's updates to seismic and tsunami hazard studies. In PG&E's response to F.1., PG&E indicated that two studies for the seismic hazard assessment at DCPP were currently being conducted: the Shoreline fault zone study and the Long Term Seismic Program (LTSP) seismic hazard update study. A progress report on the



Shoreline fault zone study was completed on January 5, 2010 and is provided herein as Attachment 2. A final report on the Shoreline fault zone study is expected to be completed in December 2010. The LTSP update study is scheduled to be completed in 2012.

In PG&E's response to the seismic vulnerability assessments (Attachment 1, F.3., p. 17), PG&E indicated that these assessments are expected to be completed in 2013, after completion of the initial updated seismic hazard analysis. PG&E is also performing a Balance of Plant seismic reliability study to address the possibility of a prolonged outage of DCPP due to damage in non-safety-related structures, systems, or components following a severe earthquake. A description of this study is provided in prepared testimony Chapter 7, "State Process and Associated Costs," supporting PG&E's license renewal application to the CPUC. PG&E's prepared testimony from its license renewal application to the CPUC is provided herein as Attachment 3. (Attachment 3, pp. 7-7 to 7-9)

In PG&E's response to the tsunami studies (Attachment 1, F.12., p. 20), PG&E indicated that it is updating the tsunami report for DCPP and will include probabilistic as well as deterministic evaluations of tsunami hazard. PG&E expects the updated tsunami report to be completed in the first quarter of 2010.

2. Summarize the lessons learned from the Kashiwazaki-Kariwa plant experience in response to the 2007 earthquake and discuss the implications that an earthquake of the same, or greater, magnitude could have on Diablo Canyon. In particular, the Commission needs PG&E to evaluate whether there are any additional preplanning or mitigation steps that the utility could take for the power plant that could minimize plant outage times following a major seismic event.

PG&E provided a summary and status of addressing the lessons learned from the Kashiwazaki-Kariwa plant experience in prepared testimony Chapter 7, "State Process and Associated Costs," supporting PG&E's license renewal application to the CPUC. (Attachment 3, p. 7-9) PG&E's review to date of the lessons learned and any implications on DCPP indicate that the existing DCPP facilities and practices address the lessons learned, but some changes to existing plant procedures and minor plant maintenance practices may be warranted. The changes are under evaluation by DCPP plant engineers and plant management. A report documenting PG&E's review and recommendations is expected to be completed in the first quarter of 2010.

3. Reassess the adequacy of access roads to the Diablo Canyon plant and surrounding roadways for allowing emergency personnel to reach the plants and local communities and plant workers to evacuate. This assessment needs to consider today's local population and not rely on the situation extant when the plant was constructed.

PG&E recently issued a contract to update the required evacuation time estimates for the Diablo Canyon Basic Emergency Planning Zone. The updated report will include a comparative assessment of the evacuation time estimates following an earthquake event. Specifically, the



approach for the proposed study is to: (1) update the damage scenarios, based on upgrades to the transportation network to reduce the likelihood of earthquake damage, and changes in estimated response times to remediate damage and return roads to service; and (2) perform a comparative analysis of evacuation times for selected roadways, with and without damage, to assess the incremental impacts of earthquake damage on evacuation time. Work on the study began in July 2009. PG&E expects to receive a complete analysis in the first quarter of 2010. Another full update of the evacuation time assessment will be prepared in 2012 to reflect 2010 census data.

4. Conduct a detailed study of the local economic impacts that would result from a shut-down of the nuclear plant and compare that impact with alternate uses of the Diablo Canyon site.

PG&E provided a status of its study to address the local economic impacts that would result from a shut-down of DCPP in prepared testimony Chapter 7, "State Process and Associated Costs," supporting PG&E's license renewal application to the CPUC. (Attachment 3, pp. 7-9 to 7-10) PG&E plans to provide and submit a detailed study comparing the local economic impacts with alternate uses of the Diablo Canyon site in the second quarter of 2010.

5. Assess low-level waste disposal costs for waste generated through a 20-year plant license extension, including the low-level waste disposal costs for any major capital projects that might be required during this period. In addition, PG&E should include its plans for storage and disposal of low-level waste and spent fuel through decommissioning of the Diablo Canyon plant as well as the cost associated with the storage and disposal.

Attachment 1, Section E (pp. 13-14) addresses the low-level waste storage, transport and disposal issues raised by the CEC. In addition, PG&E supplements this response with information provided in response to the 2007 Integrated Energy Policy Report (IEPR), Section B.9., provided as Attachment 4.

6. Study alternative power generation options to quantify the reliability, economic and environmental impacts of replacement power options.

The cost of resource alternatives to DCPP license renewal are presented and addressed in Chapters 4 and 5 of prepared testimony supporting PG&E's DCPP license renewal application to the CPUC. (Attachment 3) The environmental impacts of alternative generation resources are presented in the Federal Environmental Report PG&E prepared and submitted in support of its NRC license renewal application, which is included as Attachment 6.1 to prepared testimony Chapter 6, "Nuclear Regulatory Commission (NRC) Process and Associated Costs." (Attachment 3)



7. Include PG&E's responses to nuclear-related data requests and recommendations in future IEPRs.

Attachment 1 is PG&E's response, dated July 22, 2009, to the CEC's Nuclear Power Plant Data Request from its 2009 IEPR. This is the only nuclear-related data request PG&E has received from the CEC since June 2009.

If you have any questions or concerns regarding this letter, please contact Jennifer Post at (415) 973-9809 or Frances Yee at (415) 973-6057.

Sincerely,

Thomas E. Bottorff

cc: Carol Brown, Chief of Staff to President Peevey

Julie Fitch, Director, Energy Division

Eric Greene, Energy Division