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PG&E Letter DCL-14-081

U.S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

Diablo Canyon Units 1 and 2
Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82

Central Coastal California Seismic Imaging Project, Shoreline Fault Commitment

References:

- (1) PG&E Letter DCL-12-108, "Withdrawal of License Amendment Request 11-05, 'Evaluation of Process for New Seismic Information and Clarifying the Diablo Canyon Power Plant Safe Shutdown Earthquake,'" dated October 25, 2012
- (2) NRC Letter, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident," dated March 12, 2012
- (3) PG&E Letter, "Report on the Analysis of the Shoreline Fault Zone, Central Coastal California," dated January 7, 2011

Dear Commissioners and Staff;

Pacific Gas and Electric Company (PG&E) submits the enclosed report, Central Coastal California Seismic Imaging Project (CCCSIP).

PG&E has completed its advanced seismic studies to further document the seismic characteristics of the fault zones in the region surrounding the Diablo Canyon Power Plant (DCPP) in San Luis Obispo County. These studies have given PG&E, as well as scientists and regulators, an unprecedented view into the earth's crust that significantly and fundamentally increases understanding of the seismic characteristics near the DCPP.

PG&E performed these studies following the recommendation of the California Energy Commission (CEC) in a report issued in response to state legislation (Assembly Bill 1632, or AB 1632). AB 1632 (Blakeslee, Chapter 722, Statutes of 2006) directed the CEC to assess the potential vulnerability of California's largest baseload power-generation facilities (1,700 megawatts or greater) to a major

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disruption due to a seismic event or plant aging. Upon completing that assessment, the CEC issued a report containing the recommendation that PG&E perform additional seismic studies to supplement the original and ongoing seismic studies performed as part of PG&E's Long Term Seismic Program (LTSP), and that those studies be conducted using advanced technologies such as three-dimensional (3D) seismic-reflection mapping.

The activities that PG&E performed in accordance with the CEC recommendation were part of the CCCSIP. The CCCSIP Report consists of a technical summary, an introduction, and 12 detailed technical reports of key regional seismic features and hazards. It also contains plots that illustrate the updated deterministic ground-motion values resulting from a seismic event on the key studied faults near the DCP. In all cases, the research confirmed previous analyses that the plant and its safety related components are designed to withstand, and perform their safety functions during and after, a major seismic event.

PG&E Letter DCL-12-108 (Reference 1) included the following regulatory commitment, "If during PG&E's ongoing collection of seismic data, new faults are discovered or information is uncovered that would suggest the Shoreline Fault is more capable than currently believed, PG&E will provide the NRC with an interim evaluation that describes the actions to be taken or planned to address the higher seismic hazard relative to the design basis, as appropriate, prior to completion of the evaluations requested in the NRC Staff's March 12, 2012, request for information (Reference 2)."

The additional offshore seismic studies revealed that the Shoreline fault is longer by extending farther south than in the Shoreline Fault report (Reference 3), and therefore, more capable as described in the enclosure. PG&E concluded that the ground motions from updated shoreline fault and other regional faults remain less than the 1977 Hosgri Design ground motions, for which the plant was evaluated and demonstrated to have reasonable assurance of safety. This interim evaluation is consistent with the conclusions of Research Information Letter 12-01, "Confirmatory Analysis of Seismic Hazard at the Diablo Canyon Power Plant from the Shoreline Fault Zone," dated September 2012.

PG&E has submitted these reports to the U.S. Nuclear Regulatory Commission (NRC) and to the California Public Utilities Commission's (CPUC) Independent Peer Review Panel (IPRP). The IPRP provided valuable input during the project, shaping the scope and focus of the seismic studies. PG&E expects to receive valuable feedback from the NRC and IPRP on these study results and will respond to that feedback and/or comments in a timely manner.

Additionally, these study results will support a new NRC-mandated seismic hazard risk assessment for the DCP that is required of all nuclear power plants in the United States. PG&E is using the review process required by the NRC, known as



the Senior Seismic Hazard Analysis Committee (SSHAC) process, to incorporate and evaluate existing and new seismic information to update the seismic hazard analysis for DCP. The SSHAC process is a peer-reviewed evaluation that involves the use of independent experts. The seismic hazard analysis update is due in March 2015.

In addition to the SSHAC process, PG&E is committed, through the LTSP, to continually studying advances in geologic/seismic knowledge of the area and assessing the implications on the seismic hazard analysis of DCP, consistent with the process described in NRC Staff's March 12, 2012, request for information (Reference 2). That commitment extends beyond March of 2015 and will remain in effect throughout the operational life of the DCP.

Finally, PG&E is making its studies widely available to the public, government, and academic communities. The final updated ground-motion values will be shared with local governments and other key infrastructure operators so that those entities may evaluate the designs of their facilities against the updated seismic hazard and their emergency plans. The study data will also be shared with interested stakeholders, including the scientific and academic communities, once the peer review process is complete. The report is being distributed in hard copy or by digital video disk (DVD) as appropriate.

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this report.

Sincerely,

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Enclosure

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Central Coastal California Seismic Imaging Project

(Hard Copy Report and/or Report on Digital Video Disk (DVD))