

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

July 29, 2011

LICENSEE: Pacific Gas and Electric Company

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF JUNE 20, 2011, PRE-LICENSING MEETING WITH PACIFIC

GAS AND ELECTRIC COMPANY ON PROPOSED LICENSE AMENDMENT

FOR A NEW SEISMIC AND DESIGN EVALUATION PROCESS (TAC

NOS. ME5033 AND ME5034)

On June 20, 2011, the U.S. Nuclear Regulatory Commission (NRC) staff conducted a Category 1 pre-licensing public meeting with representatives of Pacific Gas and Electric Company (PG&E, the licensee) for Diablo Canyon Power Plant (DCPP), Units 1 and 2. The June 9, 2011, meeting notice and agenda are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML111590873. The purpose of the meeting was to further discuss the licensee's plans to submit a license amendment request (LAR) to incorporate management of new geotechnical seismic information into its design and licensing basis at DCPP, Units 1 and 2. In particular, the NRC staff wanted to discuss the licensee's proposal to designate the Hosgri earthquake (HE) as the safe shutdown earthquake (SSE) for DCPP. The NRC staff had noted during the previous meeting on June 7, 2011, that the quantification for the core deterministic analysis margins in the flowchart had been removed. As such, PG&E wanted to provide an update of the proposed DCPP Long Term Seismic Program Update Flowchart.

During the meeting on June 20, 2011, the licensee presented a set of meeting slides, entitled, "Diablo Canyon Power Plant, Seismic Design and Evaluation Process," which is available at ADAMS Accession No. ML111720570. The licensee also provided the revised Seismic Flowchart, "DCPP LTSP Update – Evaluation of Updated Seismic Hazard Information," which is available at ADAMS Accession No. ML111720634. A summary of the meeting is provided below.

PG&E stated that in addition to the original purposes of the LAR of: 1) defining an evaluation process for newly identified seismic information and 2) clarifying ongoing commitments associated with the Long Term Seismic Program (LTSP), it proposes to define the HE as the SSE for the DCPP. PG&E provided a historical background of the DCPP seismic design basis to support the construction permit and the operating license. PG&E stated that based on its review of the seismic licensing and design basis information efforts, it believes that the HE meets the criteria comparable to that defined in Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," to Part 100 of Title 10 of the *Code of Federal Regulations* (10 CFR) for the SSE. In addition, PG&E stated that the HE seismic design was reviewed by the NRC against the criteria from General Design Criterion 2, "Design bases for protection against natural phenomena," of Appendix A to 10 CFR Part 50, NRC Regulatory Guide 1.29, "Seismic Design Classification," and Appendix A to 10 CFR Part 100. As such, PG&E will request with this LAR that the current DCPP licensing basis be revised so that the HE and not the double design earthquake (DDE) be equated to the SSE. The NRC staff asked, given the

information that PG&E states is available regarding the seismic design of the DCPP, why PG&E requested NRC approval rather than make this change under 10 CFR 50.59. PG&E stated that some of the methods used for the seismic reviews could not be reconciled under 10 CFR 50.59. The NRC asked if there were any new studies performed to support this proposed change to make the HE the SSE. PG&E stated no. Mr. Kamal Manoly of the NRC staff noted that he believes this is a first of a kind request as he is not aware of any other instance where a licensee has requested to change its SSE. As such, Mr. Manoly stated that the amendment needed to describe where the methodologies and acceptance limits used in the evaluation of structures and components for the HE are deviating from the applicable provisions in the Standard Review Plan (SRP). Mr. Manoly stated that a table providing the deviations from the SRP for the HE should be provided with this LAR. Mr. Michael Markley of the NRC staff stated that because of the uniqueness of this review, he would propose that the LAR be presented to the Advisory Committee on Reactor Safeguards.

The licensee provided a revised flowchart from the meeting handout titled "DCPP LTSP Update – Evaluation of Updated Seismic Hazard Information." This methodology in this flowchart will be the cornerstone of the new methodology the licensee proposes to include in its licensing basis in its Updated Final Safety Analysis Report (UFSAR). In response to the earlier NRC staff' comments, PG&E added an additional decision box to the flowchart to determine if exceedances of the 1991 LTSP spectra result in a minimum seismic margin below 1.3. PG&E stated it believed that this seismic margin analyses is similar to what is being proposed in Generic Issue 199. The NRC staff stated this appears reasonable and will be reviewed during the amendment process.

PG&E stated that it will submit the LAR before the end of the summer of 2012. The NRC staff thanked PG&E for the presentation. There were members of the public in attendance at the meeting. While Public Meeting Feedback forms were not received, Ms. Rochelle Becker commented on the timing and location of the meeting. Ms. Becker stressed that because of the time difference, morning meetings on the East coast are inconvenient to members of the public on the West coast. Ms. Becker requested that meetings of this significance be held at a later time or on the West Coast so the public could attend. Ms. Becker also noted the phone quality was poor. The NRC staff acknowledged her concerns.

A list of meeting attendees is enclosed. Please direct any inquiries to Alan Wang at 301-415-1445 or Alan.Wang@NRCgov. .

Alan B. Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: List of Attendees

cc w/encl: Distribution via Listserv

#### LIST OF ATTENDEES

#### JUNE 20, 2011, MEETING WITH PACIFIC GAS AND ELECTRIC COMPANY

## U.S. NUCLEAR REGULATORY COMMISSION

## DOCKET NOS. 50-275 AND 50-323

#### **NRC Participants:**

#### Headquarters:

Michael Markley, Chief, Plant Licensing Branch IV, NRR/DORL Kamal Manoly, Senior Level Advisor for Structural Mechanics, NRR/DE Annie Kammerer, Senior Seismologist/Geophysicist, Structural, Geotechnical & Seismic\* Alan Wang, Project Manager, Plant Licensing Branch IV, NRR/DORL James Polickoski, Project Manager, Plant Licensing Branch IV, NRR/DORL\*

#### Region IV:

Michael Peck, Senior Resident Inspector, Diablo Canyon Power Plant \* Laura Micewski, Reactor Inspector, Engineering Branch 1 \*

## Pacific Gas and Electric Company Participants:

Loren Sharp, Senior Director, Technical Services
Norman Abrahamson, Principal Consulting Technology Seismologist, Geosciences \*
Rich Klimczak, Manager, Design Engineering
Ken Ferve, Engineer\*
Greg Heggli\*
Bill Hourstman, Consulting Engineer, Civil Engineering
Philippe Soenen, Licensing Supervisor, Regulatory Services
Tom Baldwin, Licensing Manager, Regulatory Services
Jennifer Post, Attorney, Environmental Compliance and Nuclear

# Members of the Public:

Kimberly Keithline, Nuclear Energy Institute
David Repka, Winston and Strom
Simon Lomaz, Bloomberg News
Rochelle Becker, Executive Director, Alliance for Nuclear Responsibility \*
David Weisman, Alliance for Nuclear Responsibility\*
Greg Hardy, Senior Principal, Simpson, Gumpertz, and Heger \*
Tony Llorens, Southern California Edison \*

Enclosure

<sup>\*</sup> denotes participating via teleconference

A list of meeting attendees is enclosed. Please direct any inquiries to Alan Wang at 301-415-1445 or Alan.Wang@NRCgov. .

#### /RA/

Alan B. Wang, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

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NAME	AWang	JBurkhardt	KManoly	MMarkiey	AWang

7/25/11