

JUN 29 1977

Docket Nos. 50-275  
and 50-323

APPLICANT: Pacific Gas & Electric Company (PG&E)

FACILITY: Diablo Canyon Nuclear Power Station, Units 1 and 2  
(Diablo Canyon)

**SUMMARY OF MEETING HELD ON JUNE 2, 1977, TO DISCUSS DIABLO CANYON SEISMIC DESIGN**

We met with the applicant on June 2, 1977, to discuss the seismic design of Diablo Canyon. A list of attendees is provided in the enclosure.

**BACKGROUND**

Diablo Canyon had originally been designed to withstand an earthquake with a horizontal ground acceleration of 0.4g, based on the geological investigations that had been conducted in connection with the construction permit review. During the operating license review, which was in progress, we had requested that PG&E reevaluate the plant's seismic capabilities to determine what modifications might be necessary to ensure that the plant could withstand a more severe earthquake with a horizontal ground acceleration of 0.75g, based on newer geological information. PG&E was performing such a reanalysis.

PG&E had also expressed its intention to apply for an interim operating license for Diablo Canyon to allow plant operation while the seismic reevaluation was being completed. The material needed to justify such an interim license application had previously been outlined by the NRC staff as follows:

- (1) A demonstration of the need to consider such an action, and
- (2) Information and analyses to demonstrate that the requisite level of safety would be assured during the period of the interim license. This information should include all available results of the seismic reassessment program, supported by:

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- (a) a realistic assessment of the probability of large earthquakes in the site environs and the probability of the plant to withstand such earthquakes without failures of structures and equipment sufficient to lead to unacceptable radiological consequences to the public;
- (b) a commitment to make any changes to the design determined to be necessary on the basis of the continuing seismic reassessment program; and
- (c) an evaluation of the practicality of making the need changes to a plant which has been in operation during the term of the interim license.

#### INTERIM LICENSE APPLICATION - RELATIONSHIP TO REGULATIONS

At a previous meeting on May 3, 1977, we had discussed the question of whether or not the interim license application would constitute a request for an exemption to the NRC Regulations, in particular to Appendix A to 10 CFR Part 100 and to Criterion 2 of the General Design Criteria (Appendix A to 10 CFR Part 50).

At this meeting, June 2, 1977, we informed PG&E of our opinion on this subject as follows:

- (1) Regardless of whether or not the interim license was to be considered an exemption from, an exemption to or a waiver of the regulations, the information needed to support the application, outlined above, would be substantially the same. The fundamental criterion in any approach would be that the plant must be shown to have an acceptable level of safety before an operating license would be issued.
- (2) We had considered three possible ways of stating the interim license application:
  - (a) the first possibility would be a petition for an exemption or waiver of a particular rule under 10 CFR Part 2.758 (b). The sole basis that would be allowed here was that due to special circumstances application of the particular rule would not serve the purpose for which the rule was intended. In this case, the regulations explicitly spelled out the subsequent procedures to be followed by the Licensing Board.

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- (b) The second possibility would be request for an exemption from the requirements of the regulations under 10 CFR Part 50.12. Here the regulations indicated that the requested exemption would have to be shown to:

- (i) be authorized by law,
- (ii) not endanger life or property or the common defense and security, and;
- (iii) be otherwise in the public interest.

In this case, the subsequent procedures to be followed by the Licensing Board were not explicitly spelled out in the regulations.

- (c) The third possibility would be a showing that the requested action would not constitute a deviation from the regulations in that the pertinent regulations already contemplated and allowed for an applicant to propose and justify alternate approaches. Language to this effect was contained in Appendix A to 10 CFR Part 50, 10 CFR Part 100 and Appendix A to 10 CFR Part 100.
- (3) In any of these methods the overriding and fundamental consideration would be whether or not an acceptable level of safety had been shown.
- (4) In any of these methods we would want any specific passage or section of the regulations that might not be met to be clearly identified and the reasons and justifications to be clearly stated.
- (5) We indicated that 10 CFR Part 50.57, "Issuance of operating license", would be cited in connection with any of the three methods discussed above.
- (6) The staff would not specify which method of stating the application should be used. This decision would be left to PG&E.

#### INTERIM LICENSE APPLICATION - STATUS OF SYSTEMS REANALYSIS

At a previous meeting, on April 29, 1977, PG&E had described to us those systems and portions of systems for which they intended to complete the reanalysis prior to applying for an interim license. In general, these consisted of the systems that PG&E considered necessary to ensure that the plant could be safely shutdown following a major earthquake. At this

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meeting, on June 2, 1977, we informed PG&E that we considered the probability study to be the primary tool that would be used in judging whether or not the plant would have an acceptable level of safety for an interim operating license. Accordingly, we did not consider that the interim license would be contingent upon whether or not the reanalysis had been completed for any particular system or part of a system at the new earthquake level of 0.75g.

#### SEISMIC REEVALUATION - COMBINATION OF LOADS

In order to justify a full term operating license, PG&E would need to complete the seismic reevaluation at 0.75g. We informed PG&E that in performing this reevaluation they should combine the calculated loads resulting from a postulated loss-of-coolant accident with the calculated loads resulting from the postulated earthquake at 0.75g. These loads should be combined by direct addition, as is the usual practice in nuclear plant design, rather than by using the square root of the sum of the squares. PG&E would then be expected to demonstrate to us that structures, systems and components important to safety can perform their required safety functions under the combined loading conditions. If, for any particular item, functional capability could not be demonstrated and PG&E should believe that modifications to demonstrate functional capability would be impractical or unwarranted, then PG&E would be expected to describe the situation fully and to justify its acceptability.

Original Signed By  
Dennis P. Allison

Dennis P. Allison, Project Manager  
Light Water Reactors Branch No. 1  
Division of Project Management

Enclosure:  
Attendance List

cc w/enclosure:  
See Page 5

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ENCLOSURE

ATTENDANCE LIST

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JUNE 2, 1977

PACIFIC GAS & ELECTRIC COMPANY

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J. Gormly

WESTINGHOUSE

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NUCLEAR REGULATORY COMMISSION

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D. Allison	A. Fraton
J. Knight	W. Gammill
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T. Sullivan	L. Davis

CENTER FOR LAW IN THE PUBLIC INTEREST  
(Intervenors Counsel)

D. Fleishaker

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MEETING SUMMARY

Docket File ←  
NRC PDR  
Local PDR  
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NRR Reading  
LWR 1 File  
E. G. Case  
R. S. Boyd  
R. C. DeYoung  
J. Stolz  
K. Kniel  
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S. Varga  
L. Crocker  
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