



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

November 12, 1980

Honorable John F. Ahearne  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

SUBJECT: DIABLO CANYON NUCLEAR STATION

Dear Dr. Ahearne:

As part of its broad examination of the implications of the accident at Three Mile Island Unit 2, the Advisory Committee on Reactor Safeguards recommended that, at least for a plant in a region of high seismicity, a review be made of the possible adverse interactions of nonsafety systems on plant safety as the result of an earthquake. The Pacific Gas & Electric Company (PG&E) decided to perform a study of such interactions for its Diablo Canyon Nuclear Station and the ACRS, during its 247th meeting, November 6-8, 1980, reviewed the methodology used and some of the results of this effort. In our review we had the benefit of discussions with representatives of PG&E and the NRC Staff and of a Subcommittee meeting held on October 8, 1980. The Committee also had the benefit of the documents listed.

PG&E utilized a walkdown technique and interdisciplinary teams for this review. This procedure is similar to that recommended as a possible approach for the Indian Point 3 reactor in our letter to Mr. L. Gossick of October 12, 1979 titled, "Systems Interactions Study for Indian Point Nuclear Generating Station, Unit No. 3." PG&E prepared a very thorough and systematic plan for this study and devoted a considerable amount of resources to its accomplishment. We agree that the approach taken by PG&E was suitable for the task.

We were told that the NRC Staff has audited the effort and that the bulk of the work has been completed. A considerable number of adverse interactions which might occur during a strong earthquake at the site were found and have been remedied. When PG&E completes the work, the NRC Staff will review and evaluate the final results.

We believe that, subject to final NRC Staff approval of the study and the resulting plant modifications, the PG&E examination of seismically induced

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interactions is suitable and provides additional assurance concerning the ability of the plant to withstand a severe earthquake and accomplish safe shutdown.

Sincerely,

A handwritten signature in black ink, reading "Milton S. Plesset". The signature is written in a cursive style with a large, stylized 'M' and 'P'.

Milton S. Plesset  
Chairman

References:

1. "Safety Evaluation Report Related to the Operation of Diablo Canyon Nuclear Power Station Units 1 and 2," USNRC Report NUREG-0675, Supplement 11, dated October, 1980
2. "Description of the Systems Interaction Program for Seismically-Induced Events, Diablo Canyon Units 1 and 2," Revision 4, Pacific Gas and Electric Company report dated August 29, 1980