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IN THE PUBLIC INTEREST

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July 17, 1984

Nunzio Palladino, Chairman  
James Asselstine, Commissioner  
Frederick Bernthal, Commissioner  
Thomas Roberts, Commissioner  
Lando W. Zech, Jr., Commissioner  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Re: In the Matter of Pacific Gas and Electric Company  
(Diablo Canyon Nuclear Power Plant, Units 1 and 2),  
Nos. 50-2750L, 50-3230L

Dear Chairman Palladino and Members of the Commission:

On behalf of the Joint Intervenors to the above-entitled proceeding, I am writing to request an indefinite postponement of your scheduled vote on Pacific Gas and Electric Company's ("PGandE") application for a full power license for the Diablo Canyon Nuclear Power Plant ("Diablo Canyon"). This request is based on recent evidence that the seismic danger associated with the plant is significantly greater than previously assumed by this Commission's Appeal Board in ALAB-644, issued on June 16, 1984 in this proceeding.

The Joint Intervenors yesterday filed with the Appeal Board an extensive motion to reopen the record on seismic issues, a copy of which has been served on the members of this Commission under separate cover. As is documented at length in that motion, the new evidence -- consisting of (1) ground motion data obtained from recent major earthquakes, (2) geologic data obtained from studies just completed, and (3) recent analyses of focal mechanisms of earthquakes near the central coast of California -- indicates that the levels of ground motion at the Diablo

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Canyon site associated with an M 6.5 to M 7.5 earthquake are likely to exceed the maximum values assumed by the Appeal Board in its approval of the facility's seismic design. More specifically, it includes data from recent earthquakes of significantly lower magnitude than the Diablo Canyon SSE, but which generated accelerations in the frequency range of interest that substantially exceed the Diablo Canyon design spectrum, including -- during the April 24, 1984 Morgan Hill, California earthquake -- the highest horizontal accelerations ever recorded for any earthquake. These data establish that, contrary to the Board's conclusion in ALAB-644, the Bond's Corner record from the 1979 Imperial Valley earthquake and the Pacoima Dam record for the 1971 San Fernando earthquake do not represent "distorted responses," ALAB-644, at 94. To the contrary, those records, together with the new data discussed in the Joint Intervenor's motion, indicate that the Diablo Canyon design spectrum is not conservative but rather significantly understates the expected ground motion at Diablo Canyon caused by an earthquake in the range of M 6.5 to 7.5 on the Hosgri Fault.

Further, recent data also belie the Appeal Board's characterization of the phenomena of "focusing" and "high stress drop" as "speculative" and its consequent rejection of the contention by the Joint Intervenor and the Governor that those phenomena are likely to increase significantly the ground forces of a major earthquake on the Hosgri Fault. ALAB-644, at 87-88. A recent paper prepared by the United States Geological Survey ("USGS") concludes that the April 1984 Morgan Hill, California earthquake clearly exhibited the effects of focusing or high stress drop, leading to the unprecedented recorded peak horizontal acceleration of 1.29g. Because the M 6.1 Morgan Hill earthquake is a much smaller earthquake than the M 7.5 SSE predicted at Diablo Canyon, the occurrence of such phenomena during a major earthquake on the Hosgri Fault is likely to result in forces significantly greater than the .75g peak acceleration assumed for the facility.

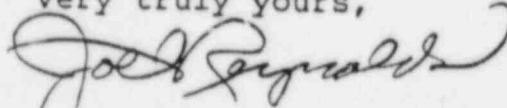
Recent geologic data and focal mechanism studies, which describe the type of faulting and earthquake movement expected in the region of the central California coast, unanimously indicate that, contrary to the Board's explicit finding, ALAB-644, at 74, 88, the Hosgri Fault is not primarily of the strike-slip variety but is characterized by thrust motion and may actually dip under and even closer to the plant site than previously assumed. Consequently, it is

likely to generate forces two to three times greater than that anticipated in the event of a strike-slip quake of the same magnitude. Such evidence further bolsters the Joint Intervenor's contention in this proceeding that, far from being conservative, the seismic design criteria for Diablo Canyon approved by this Board in ALAB-644 are inadequate and do not meet regulatory requirements.

Finally, studies of recent earthquakes in the central California coastal region confirm the Joint Intervenor's contention that Diablo Canyon is located in an area of high seismicity, a fact in direct conflict with the Board's conclusion that the plant is sited in an area of "low to moderate seismicity." ALAB-644, at 174-175. Since 1978, four earthquakes with magnitudes greater than 5.0 have occurred in the tectonic province near the Hosgri Fault, and since 1980 two of these have occurred on either side of the Diablo Canyon site. Still more recently, on June 20, 1983, an M 4.7 earthquake occurred on the Hosgri Fault near the epicenter of the 1980 Pt. Sal earthquake. Thus, according to Dr. James Brune, Professor of Geophysics at the University of California at San Diego, in light of this recent direct evidence of high seismicity, "it would be no surprise to have an earthquake of much larger size, as large as the Diablo Canyon design earthquake (M=7.5) at any time."

In light of this new information, commercial operation of Diablo Canyon would unreasonably endanger the public health and safety of the residents of San Luis Obispo County. Accordingly, PGandE's application for a license to operate Diablo Canyon must be rejected pending a full on the record examination of this compelling new evidence that Diablo Canyon is not adequately designed to shut down safely in the event of an M 6.5 to 7.5 earthquake on the Hosgri Fault.

Very truly yours,



Joel R. Reynolds  
Counsel to the  
Joint Intervenor

JRR:cc  
cc: Diablo Canyon Service List