

OCT 16 1980

ACMS

Ms. Denise M. M. Robb
1146 North Lotus Street
Anaheim, California 92801

Dear Ms. Robb:

Your February 14, 1980 letter to President Carter regarding the Diablo Canyon nuclear plant has been referred to the NRC for reply. I am pleased to respond.

You expressed concern over the ability of the Diablo Canyon nuclear plant to withstand earthquakes and the effects of low level radiation. I am pleased to provide the enclosed responses to these concerns.

You also expressed concern over the San Onofre plant and its proximity to the Newport-Inglewood and the San Andreas faults. The San Onofre nuclear plants are designed and constructed to safely withstand the largest earthquake that can reasonably be expected to occur in the general area of the plants such as the offshore extension of the Newport-Inglewood fault (five miles from San Onofre) and the San Andreas fault (sixty miles from San Onofre).

Furthermore, the Atomic Safety and Licensing Board assigned to review the seismic adequacy of the San Onofre plants will reopen the hearing record in the first quarter of 1981. This board will consider all issues related to the seismic adequacy of the plants that have been properly brought before it and will rule on the seismic design adequacy before the NRC can take any action to issue an operating license to Southern California Edison Company to operate the San Onofre, Units 2 and 3.

I trust that this information is responsive to your request.

Sincerely,

Frank J. Miraglia, Acting Chief
Licensing Branch No. 3
Division of Licensing

Enclosures:

1. Proximity of the Hosgri Fault to Diablo Canyon
2. Low Level Radioactivity Effects

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SURNAME	KNJabbour:mec	HRood		FJMraglia	
DATE	10/07/80	10/07/80	10/14/80	10/15/80	

ENCLOSURE 1

Concern: The proximity of the Hosgri Fault to the Diablo Canyon site and the ability of the plant to withstand a severe earthquake.

Response: The Hosgri fault, which is located 3 1/2 miles from the Diablo plants, was discovered in 1971 and has been the subject of intensive investigation by the Pacific Gas & Electric Company (PG&E), the U.S. Geological Survey (USGS) and the Nuclear Regulatory Commission. As a principal geologic advisor for the Commission, the USGS in 1975 suggested that a magnitude of 7.5 be assigned as a potential seismic value for the Hosgri Fault. It is important to note that the USGS did not say that the Hosgri would experience a 7.5M earthquake but from a conservative standpoint that magnitude could not be ruled out. Comprehensive public hearings on this matter were held by the Atomic Safety and Licensing Board (ASLB) over about a two-month period (from December 1978 to early 1979). Some of this nation's and the world's leading authorities testified and were subject to cross-examination. The experts from the NRC staff and PG&E went on to say that the plant has been designed to withstand the greater seismic event of 7.5. On September 26, 1979, the ASLB assigned to conduct the licensing hearings issued its partial initial decision which found that a 7.5 magnitude earthquake is reasonable and meets regulatory requirements. On June 23, 1980 the Atomic Safety and Licensing Appeal Board for this matter issued a decision to reopen the hearing record to obtain testimony related to a major earthquake which occurred in California's Imperial Valley in October 1979 (shortly after the ASLB's favorable partial initial decision in September 1979). The NRC staff testimony on this issue was submitted to the Appeal Board in August 1980. Starting on October 20, 1980 the Appeal Board will hear this matter.

ENCLOSURE 2

Concern: Low Level Radioactivity Effects.

Response: In the matter of low level radiation hazards, the Commission has always subscribed to the principle that radiation exposure of the public should be kept as low as is reasonable achievable. This principle has been a central one in the field of radiation protection for many years.

Operating licenses of nuclear power plants include provisions to limit and control radioactive effluents from the plants. The term "as low as is reasonably achievable" requires taking into account the state of technology, the economics of improvements in relation to benefits to the public health and safety, other societal and socioeconomic considerations, and the relationship of these to the use of nuclear energy in the public interest.

The Commission has adopted numerical guidelines for design objectives and limiting conditions for operation of nuclear power plants to meet the criterion of "as low as reasonably achievable" for radioactive material in effluents from nuclear power plants. Using these guidelines, the radiation resulting from radioactive release from nuclear power plants during normal plant operation is a small fraction of that received from natural background activity.

The NRC has expended substantial effort in studying the potential health effects of low-level radiation on humans. Funding has been allocated for research on the effects of specific radioactive isotopes and of epidemiology studies, the analyses of current research in the field of radiobiology and epidemiology and the drawing up of preliminary plans to study the feasibility of a large-scale epidemiology investigation on low level radiation effects. The NRC staff is also participating with international agencies on the control of long-lived radionuclide emissions from the nuclear fuel cycle.

In regard to Diablo Canyon, environmental matters including low level radiation effluents from the Diablo Canyon Nuclear Power Plants were the subject of proceedings in a public hearing. After extensive consideration, the Atomic Safety and Licensing Board issued a Partial Initial Decision on June 12, 1978 and concluded that the effects of low level radiation from plant operation will be negligible and will result in no significant risk or increase of genetic defect incidence in the population of the San Luis Obispo area during the projected thirty years of operation.

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