

July 31, 1981

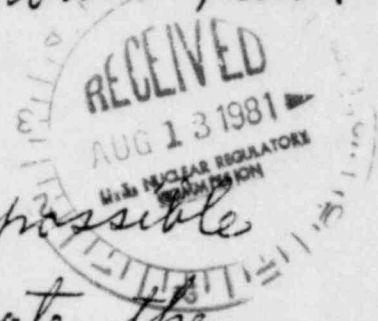
Joseph Talladino, Chairman
Nuclear Regulatory Commission
Washington, D.C., 20555

Subject: Diablo Canyon nuclear power plant

Dear Mr. Talladino:

Proceedings leading to possible issuance of a license to operate the subject power plant have been running on for some years, as you are well aware.

One of the principal arguments advanced in opposition to licensing the plant, is the claim that since there is an earthquake fault located about a mile or two offshore from the plant, an earthquake might occur causing plant damage of such extent and severity as to permit release of radioactive material in large quantity with probable injury to (principally) downwind population.



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I do not believe that an earthquake in the plant area would cause rupture of the plant's reactor(s) and containment, as explained following.

On Good Friday, March 27, 1964, Anchorage, Alaska, and the surrounding territory were struck by an earthquake of 8.4 - 8.6 magnitude on the Richter scale (according to various technical reports issued subsequently). Resulting damage was widespread and, to some structures, considerable.

At the time, I was a supervisory electrical engineer on the staff of the Federal Power Commission's San Francisco Regional Office. I was sent to Alaska to inspect and appraise the extent of damage done to electric power systems and equipment.

The inspections were made and I submitted written reports stating what I found during the course of my examination of some ten electric power systems ranging in size from those of small villages such as Kenai and Seldovia to the larger systems of the City of Anchorage and Chugach Electric Association.

Chugach, the U. S. Army's Fort Richardson, and Elmendorf Air Force Base all had steam-electric (coal-fired) generating plants. In all three plants, although there was damage to some parts of plant facilities, in no case was the steam turbine or the generator that it powered, damaged in any way.

This, perhaps surprising lack of damage,

was attributed, both by the plant operators and me, to the fact that these three steam turbo-generators were mounted on heavy, extensively reinforced bases.

It seems evident, therefore, that if these three relatively small, low temperature and pressure, steam turbine generators could ride through an 8.5 Richter magnitude earthquake without damage, the much larger and heavier Diablo Canyon nuclear reactors and turbine generators, with their massive, heavily reinforced bases would suffer no damage from earthquake tremors to be expected in their area of California.

Yours truly,
George R Bell, Regional Engineer (retired)
Federal Power Commission, San Francisco
(now Federal Energy Regulatory Commission)