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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 9, 1999

Mr. Steve Dwyer
P.O. Box 3393
Mission Viejo, CA 92690

SUBJECT: REPLY TO YOUR E-MAIL DATED SEPTEMBER 23, 1999, TO THE CHAIRMAN
OF THE NUCLEAR REGULATORY COMMISSION

Dear Mr. Dwyer:

By your e-mail dated September 23, 1999, to the Chairman of the Nuclear Regulatory Commission (NRC), you expressed concerns relating to the seismic design adequacy of the San Onofre Nuclear Generating Station (SONGS). Specifically, you stated that:

- a. recent seismic activity at Taiwan, Kobe, etc., resulted in failures of not only "old substandard structures" but also new "relatively well built" structures,
- b. potential seismic activity at SONGS area with a magnitude similar to that at Taiwan could have significant adverse consequences,
- c. since the design-basis seismic curves are "maxed out", new calculations, would exceed all "old outdated design parameters," and
- d. SONGS structures, systems, and components have "passed its prime and hidden corrossions and old design," and the licensee has not upgraded them. Failures are "waiting to happen."

On the basis of the above, you requested:

- a. emergency shutdown of SONGS, in particular, and other facilities, in general,
- b. full update of SONGS' seismic design and reports, and
- c. upgrade of SONGS system, structures, and components.

In response to our October 7, 1999, e-mail to you, by e-mail dated October 23, 1999, you informed us that your September 23, 1999, e-mail (hereinafter referred to as the petition) is a 10 CFR 2.206 petition. In accordance with the NRC's Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," we scheduled a telephone conference call with you for November 1, 1999, at 2:30 p.m. EST (eastern standard time) to provide an opportunity for you to present your petition to the NRC staff. At the scheduled time, the NRC staff convened and stayed on the telephone bridge until approximately 3:00 p.m. EST awaiting your participation in the telephone call. You did not call us and the telephone conference call was terminated without your participation, at approximately 3:00 p.m. EST. On November 1, 1999, by an e-mail to us you indicated that you could not call us due to a communication problem and that we should proceed with the petition process without your participation.

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We considered your request as a 10 CFR 2.206 petition and evaluated your request in accordance with the MD 8.11. We have determined that the issues raised in your request to be generic in nature and the supporting facts to be insufficient to warrant further inquiry. We also find your request to be a restatement of issues that you previously raised and that were not substantiated by the NRC staff. In addition, you did not present any plant-specific information or any new information that would change the agency's position regarding the seismic design at SONGS. Accordingly, we have determined that your request does not meet the threshold criteria for treating your request as a 2.206 petition (Part III of MD 8.11, page 8). Our basis for this determination is discussed below.

You have previously raised the seismic design issues at SONGS. By petition dated September 22, 1996, you stated that SONGS design criterion of "0.75 G's acceleration," is "fatally flawed" as a result of new information gathered at the Landers and Northridge earthquakes. You requested that the NRC shut down the SONGS facility "as soon as possible" pending a complete review of the "new seismic risk." The NRC evaluated your request and on September 19, 1997, provided you the Director's Decision (DD)-97-23. This director's decision did not substantiate your concern and denied your request. DD-97-23 discussed the regulatory requirements associated with potential earthquake motion and the licensing basis for SONGS. I am summarizing below certain relevant portions of the DD-97-23 for your ready information.

SONGS was licensed consistent with the seismic and geologic siting criteria for nuclear power plants set forth in 10 CFR Part 100, Appendix A. The site has undergone geologic, geophysical, geotechnical, and seismic investigations and reviews that are at least as thorough and comprehensive as those of any critical facility. The SONGS safe shutdown earthquake (SSE) is based on the assumed occurrence of a surface-wave magnitude 7 earthquake on the offshore zone of deformation (OZD), a right lateral strike slip fault zone, approximately 8 kilometers from the site at its closest approach. This magnitude 7 event is larger than any earthquake known to have occurred on the OZD, and the resulting ground motion estimate is larger than that which could reasonably be expected at the SONGS site from any other seismic source. The geologic and seismic siting and the design of SONGS were reviewed by the NRC staff, the U. S. Geological Survey, the National Oceanic and Atmospheric Administration, and the Advisory Committee on Reactor Safeguards and were litigated before the Atomic Safety and Licensing Board before they were licensed by the Commission.

In addition, the plant has design margins (capability) well beyond the demands of the SSE. The ability of a nuclear power plant to resist the forces generated by the ground motion during an earthquake is thoroughly incorporated in the design and construction of the plant. The codes that govern the construction of residential and commercial buildings are far less stringent than the requirements for nuclear power plants. As a result, nuclear power plants are able to resist earthquake ground motions well beyond their design basis, the SSE, and far above the ground motion that would result in damage to buildings designed and built to commercial codes.

On the basis of the above assessment, and absent new information regarding recent earthquakes, which the NRC staff was not already aware, your seismic concerns were not substantiated.

S. Dwyer

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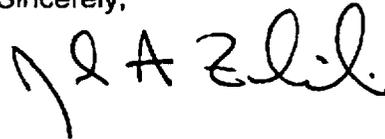
Also, by e-mail dated April 25, 1997, you raised concerns about component degradation and the ability of the SONGS steam generators to withstand a major seismic event. Again the NRC staff evaluated your request and by DD-98-06, dated June 11, 1998, informed you that your concern regarding component degradation and consequent impact on seismic loads on them, was not substantiated. Your September 23, 1999, petition did not provide, and the NRC is not aware of, any specific details regarding component degradation at SONGS such that its seismic adequacy is adversely affected. Absent such specific information, we do not find any basis to pursue action on your concerns.

Please be assured that the NRC pursues a "defense-in-depth philosophy" to provide reasonable assurance that nuclear facilities can be operated without undue risk to the health and safety of the public. This "defense-in-depth philosophy" ensures that safety is not founded on any single element of the design, maintenance, or operation of a nuclear plant but rather defense in depth is maintained through regulatory requirements that encompass areas such as diversity and redundancy in design, construction, testing, maintenance, training, and regulatory oversight.

On the basis of above, and absent specific details regarding the basis for your concerns, we find that your concerns are not substantiated and we do not find it necessary to initiate further actions on your concerns.

We trust that this has been responsive to your concerns. Should you have any questions or comments regarding these matters, please call me toll-free at 1-800-368-5642.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Zwolinski". The signature is written in a cursive style with a large initial "J" and "Z".

John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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Sincerely,

Original Signed By:

John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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