

7-7-75

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

PACIFIC GAS AND ELECTRIC COMPANY

(Diablo Canyon Nuclear Power Plant,  
Unit Nos. 1 and 2)

Docket Nos. 50-275 O.L.  
50-323 O.L.

NRC STAFF'S RESPONSE TO INTERROGATORIES  
OF SAN LUIS OBISPO MOTHERS FOR PEACE

On June 19, 1975, Intervenor San Luis Obispo Mothers for Peace propounded 12 interrogatories to the Staff of the Nuclear Regulatory Commission (NRC). The Staff responds now to Interrogatories 2, 5, 7, 8, 9, 10, 11 and 12. We will respond as soon as possible to Interrogatories 1, 3, 4 and 6.

2. With respect to the ability of the Diablo Fuel Handling Building, and its fuel racks, cranes, manipulators, all piping and water system, as well as the result of its contents, and the Design Class I tanks adjacent to it, to withstand a DDE, please set forth

- A. The nature of NRC detailed review and analytical checks, if any, of PG&E calculations.
- B. The extent of NRC review of PG&E calculations.

Response

- A. The Staff has reviewed in detail the Preliminary (PSAR) and Final Safety Analysis Reports (FSAR), including the design criteria in Sectiond 3.3.1, 3.3.2, 3.4, 3.5.3, 3.7 and 3.8 of the FSAR. In addition the Staff is reviewing the design criteria in several reports related to high energy line breaks

and qualification of equipment which relate to the fuel handling building and equipment. The Staff has performed some detailed audits of PG&E calculations for buildings and equipment at Diablo Canyon with similar design criteria to the fuel handling building. The Staff has not performed a detailed review or analytical checks of PG&E calculations regarding the ability of the fuel handling building, its contents and adjacent tanks to withstand a Design Basis Earthquake.

B. See the response to interrogatory 2A

5. Identify the first commercial power plant to use 17 x 17 fuel assemblies. If no commercial plant has used a core comprised entirely of 17 x 17 assemblies, what plant will be the first to do so?

Response

The first commercial power plant to use 17 x 17 fuel assemblies was Surry Unit 1, which used two 17 x 17 assemblies. No commercial power plant has used a core comprised entirely of 17 x 17 assemblies. The Staff does not know what plant will be the first to do so because future variations in construction schedules can affect the outcome. However, the Staff expects that one of the following plants will be the first to employ a core comprised entirely of 17 x 17 assemblies:

Beaver Valley Unit 1

Trojan

Diablo Canyon Unit 1

Salem Unit 1

7. With respect to the 17 x 17 core design please set forth those areas that have not, as yet, been qualified, by the NRC Staff, as complying with the ECCS final acceptance criteria.

Response

FLECHT Test Data: Extrapolation of 15 x 15 FLECHT test data to 17 x 17 has been approved on an interim basis based on preliminary data provided by Westinghouse to justify the extrapolation. Final approval is pending formal submittal and evaluation of test results on the 17 x 17 fuel rods.

8. If the definitive location of the 1927 magnitude 7.3 earthquake ultimately becomes a value judgement by all concerned, due to lack of definitive data, do you feel obliged to postulate its location on the Hosgri, in the interests of the public health and safety?

Response

In determining the location of the 1927 earthquake the Staff will consider all of the facts and circumstances available at the time the decision is made. Some of those facts and circumstances have not yet been developed. Some may preclude postulation of the location on the Hosgri fault. Therefore, the Staff cannot now say whether it will feel obliged to



postulate the location on the Hosgri fault. So the answer at this time is no.

9. If answer to above is no, please set forth basis for answer.

Response

See answer to Interrogatory 8.

10. In the context of 10 CFR 100, Appendix A, what do you consider to be the magnitude of the maximum earthquake that could occur on the Hosgri Fault Zone?

Response

On the basis of presently available information, Richter Magnitude 6.5

11. Reference NRC-Diablo Canyon SER Supplement No. 2 (May 9, 1975) p. 4-8. Please send us an updated version with details of Table 4.1.

Response

The Staff does not have a version of Table 4.1 which is more recent than that contained in Diablo Canyon SER Supplement No. 2.

12. With respect to generic 17 x 17 fuel assembly evaluation and verification program, please identify first plant expected to use
- A. One or two 17 x 17 assemblies
  - B. A full core of 17 x 17 assemblies

Response

See the answer to interrogatory No. 5.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "James R. Tourtellotte". The signature is fluid and cursive, with a large initial "J" and "T".

James R. Tourtellotte  
Assistant Chief Hearing Counsel

Dated at Bethesda, Maryland  
this 7th day of July, 1975

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A handwritten signature in dark ink, appearing to read "James R. Tourtellotte", is written over a horizontal line.

James R. Tourtellotte  
Assistant Chief Hearing Counsel