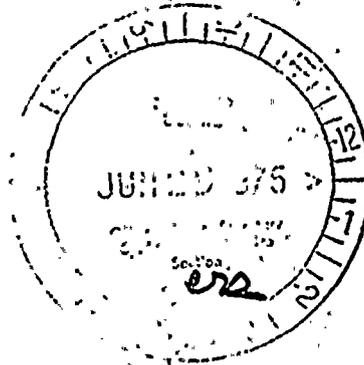


6-19-75

RECEIVED CORRESPONDENCE

SAN LUIS OBISPO MOTHERS FOR PEACE/June 19, 1975

Mr. James R. Tourtellotte
Office of Executive Legal Director
BETH 042
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



Dear Mr. Tourtellotte:

Transmitted herewith, on behalf of Mothers for Peace and myself,
is an interrogatory to which we would appreciate the Staff's
response.

Sincerely yours,

Sandra A. Silver

Sandra A. Silver
1315 Cecelia Ct.
San Luis Obispo, CA 93401

Xc. with interrogatory:
Elizabeth S. Bowers
Glenn O. Bright
William P. Cornwell
Frederick Eissler
Raye Fleming
William E. Martin
Alan S. Rosenthal
Gordon Silver
Andrew J. Skaff
Philip A. Crane
Secretary, NRC



37-111



June 19, 1975

U.S. Nuclear Regulatory Commission
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)
PACIFIC GAS & ELECTRIC CO.)
Diablo Units 1 and 2)

Docket Nos. 50-275/323-OL

INTERROGATORIES PROPOUNDED BY
SAN LUIS OBISPO MOTHERS FOR PEACE
OF NRC-REGULATORY STAFF

San Luis Obispo Mothers For Peace (MFP) submits the following inter-rogatories to be answered under oath by such NRC personnel as may have knowledge of the facts, in accordance with 10 CFR 2.720(h)(2)(ii). References herein to "NRC" are to the Nuclear Regulatory Commission, including its officers, employees, consultants etc.

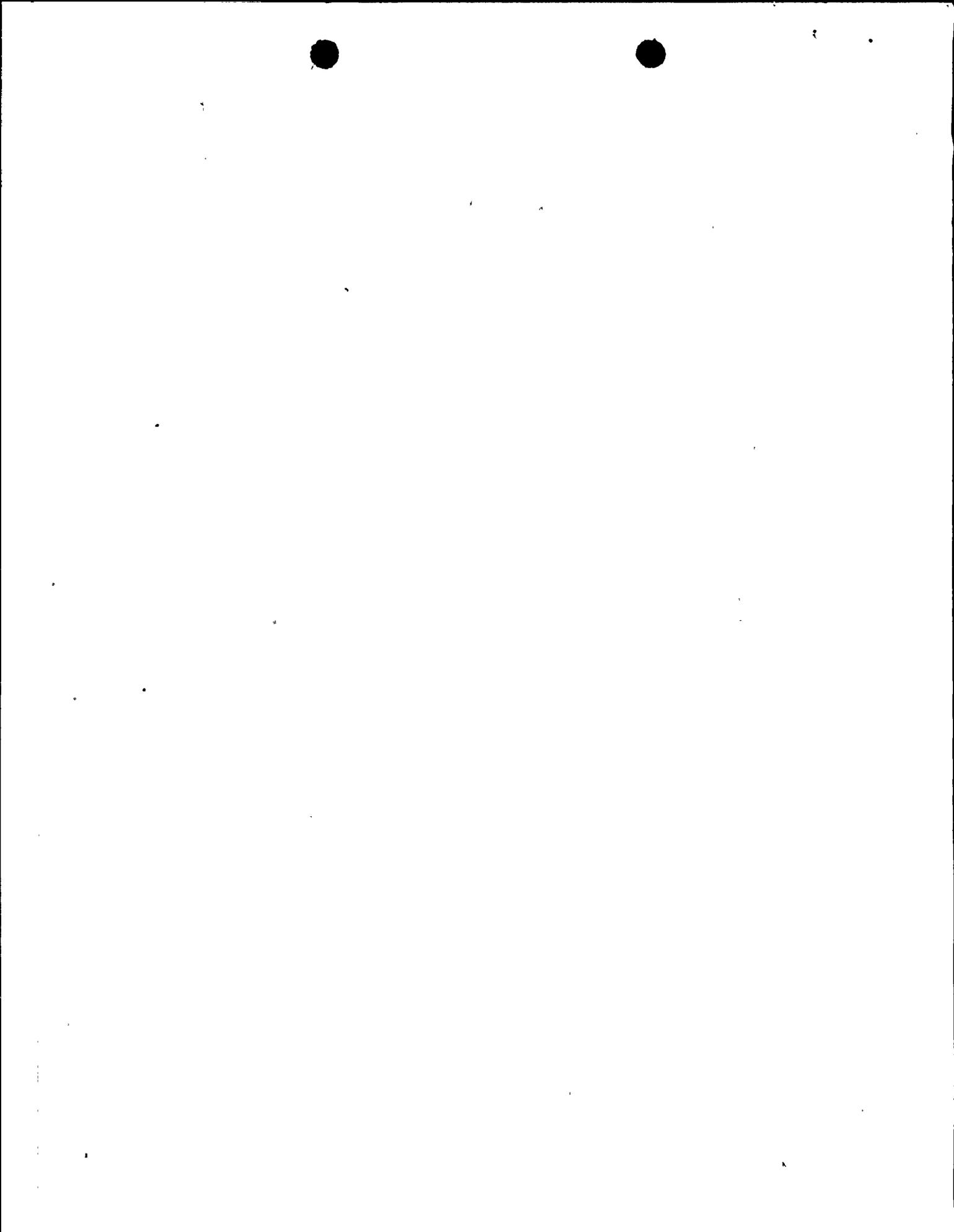
Inasmuch as the questions submitted herewith relate to considerations pertinent to the Fresh Fuel Assembly (FFA) Motion filed by MFP on April 10, 1975, we request that the Staff's response be in our hands at least two weeks prior to the first day of the FFA evidentiary hearing.

1. On or about December 27, 1974 Pacific Gas and Electric Co. (PG&E) submitted to the AEC Staff a report which purportedly reviewed the capacity of the Diablo Canyon facilities' ability to function in the presence of local ground accelerations in excess of the original Design Earthquake (DE) figure of 0.20g, and to be capable of a safe shutdown in the presence of local ground accelerations in excess of the original Double Design Earthquake (DDE, now known as SSE) value of 0.40g.
 - A. Please identify the above report and all other PG&E reports addressed to the cited subject.
 - B. Please identify all AEC/NRC comments on the above report(s).
2. With respect to the ability of the Diablo Fuel Handling Building, and its fuel racks, cranes, manipulators, all piping and water systems, as well as the rest 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.
3. Identify by title, author, investigator, agency, beginning date, and completion date, all studies, reports, memoranda, correspondence, investigations, and other documents pertaining to the geology and seismological environment of the Diablo Canyon Power Plant, Units 1 and 2, of which you are aware that are



- A. Completed
- B. In progress
- C. Projected for the future

4. Identify by title, author, investigator, agency, beginning date, and completion date, all studies, investigations, reports, memoranda, correspondence, and other documents pertaining to the structural engineering design criteria of seismic category I and category II systems and components of the proposed Diablo Canyon power plant units 1 and 2, which are
 - A. Completed
 - B. In progress
 - C. Projected for the future.
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?
6. Describe proposed procedures, if any, involving limitations on onsite storage of spent fuel.
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.
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?
9. If answer to above is no, please set forth basis for answer.
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?
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.
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



SAN LUIS OBISPO MOTHERS FOR PEACE/June 19, 1975



Mr. Philip A. Crane, Jr.
 Law Department
 Pacific Gas and Electric Co.
 77 Beale Street
 San Francisco, CA 94106

(Re: NRC Dockets 50-275/323-OL)

Dear Mr. Crane:

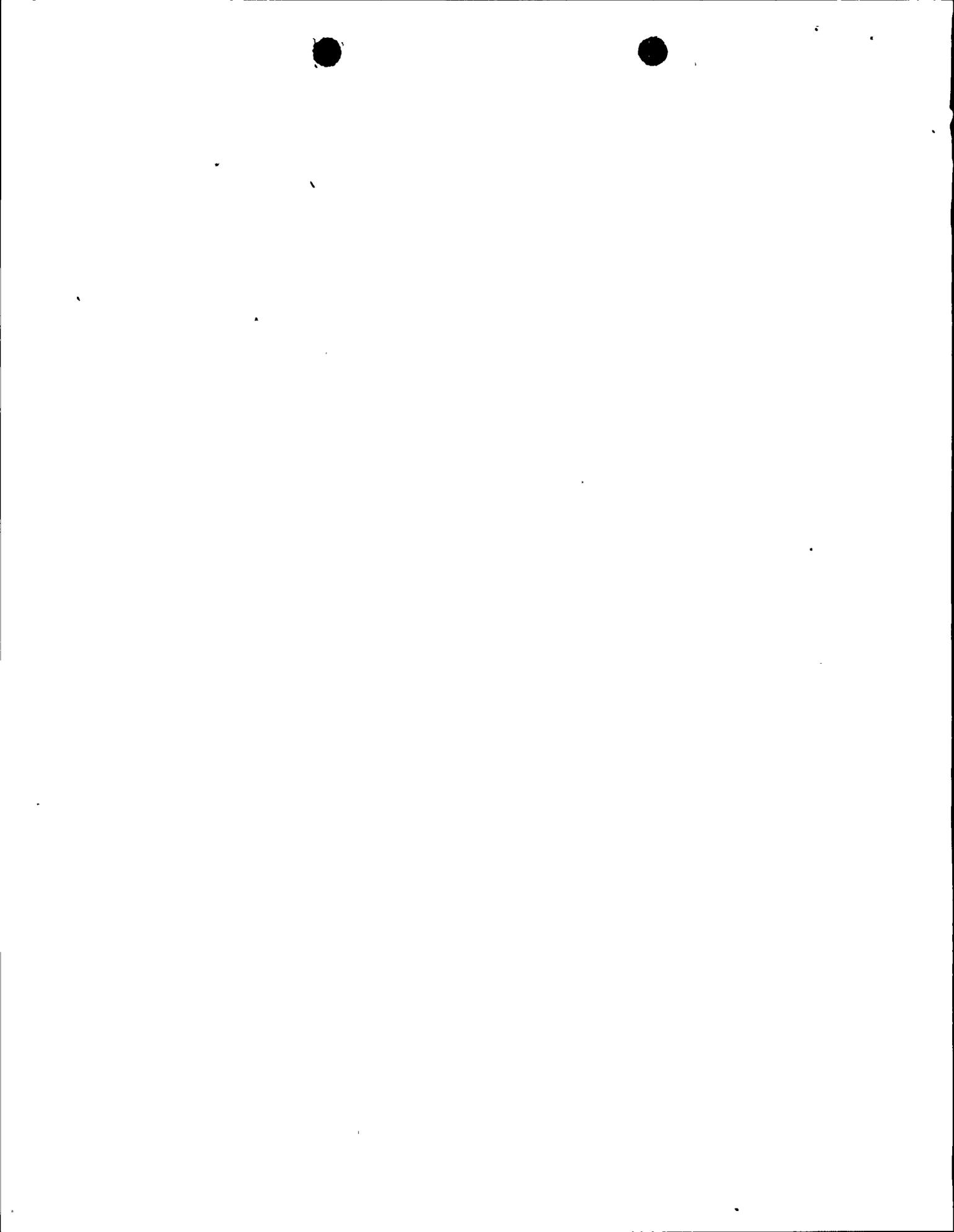
Transmitted herewith, on behalf of Mothers For Peace and myself, is an interrogatory and discovery requests. Inasmuch as the questions pertain to issues to be considered at the forthcoming nuclear fuel assembly evidentiary hearing, your prompt response is requested. Kindly ensure that we are in receipt of your completed responses, in their entirety, at least two weeks prior to the first day of the hearing or, in accordance with the time provisions of 2.740 b and 2.741, whichever gives us more time to go over your responses before the hearing.

Sincerely yours,

Sandra A. Silver

Sandra A. Silver
 1315 Cecelia Court
 San Luis Obispo, CA 93401

Xc with interrogatory:
 Elizabeth S. Bowers
 Glenn O. Bright
 William P. Cornwell
 Frederick Bissler
 Raye Fleming
 William E. Martin
 Alan S. Rosenthal
 Gordon Silver
 Sandrew J. Skaff
 James Tourtellotte
 Secretary, NRC



June 9, 1975

In the Matter of
PACIFIC GAS & ELECTRIC CO.)
Diablo Canyon, Units 1 and 2)

Dockets 50-275/323-OL

INTERROGATORIES AND DISCOVERY REQUESTS
PROPOUNDED FOR PACIFIC GAS AND ELECTRIC BY
SAN LUIS OBISPO MOTHERS FOR PEACE

San Luis Obispo Mothers for Peace (MFP) submits the following interrogatories and discovery requests to the applicant (PG&E) to be answered, under oath, by such PG&E personnel as have knowledge of the facts, in accordance with the provisions of 10 CFR Parts 2.740b and 2.741. References herein to "PG&E" are to the Pacific Gas and Electric Co, including its officers, employees, vendors (e.g., Westinghouse), contractors, shippers, and consultants, where applicable.

1. Identify by title, author, investigator, agency, beginning date, and completion date, all studies, reports, memoranda, correspondence, investigations, and other documents pertaining to the geology and seismological environment of the Diablo Canyon Power Plant Units 1 and 2, of which you are aware, that are
 - A. Completed
 - B. In Progress
 - C. Projected for the future
2. Please answer interrogatory 1 A,B,C but pertaining to establishment of structural engineering design criteria of seismic Category I and Category II systems, components, structures, and buildings which exist in the neighborhood of where it is anticipated fresh fuel assemblies will be received, unloaded, unpacked, transferred, stored, inspected, and repaired.
3. Will the PG&E facilities in the "Five Cities" area of Pismo Beach, Calif. be used in connection with the fresh fuel cycle?. If yes, please describe nature of use.
4. Reference FSAR, "Reporting of Security Incidents." p. 13.7-7. Line six is vague because the words "facts" and "substantiated" are not quantitated. Please explain.
5. For Unit 1 please provide currently anticipated dates for
 - A. Shipping of first fresh fuel assembly from Columbia, S.C.
 - B. Arrival on site of first assembly
 - C. Arrival on site of last assembly
 - D. Beginning of fuel loading
 - E. Completion of fuel loading
 - F. Criticality
 - G. Synced and on line
6. With respect to initial fuel assembly shipments, identify with as much precision as possible, the route to be followed by trucks within San Luis Obispo, Santa Barbara, Ventura, and Los Angeles Counties.

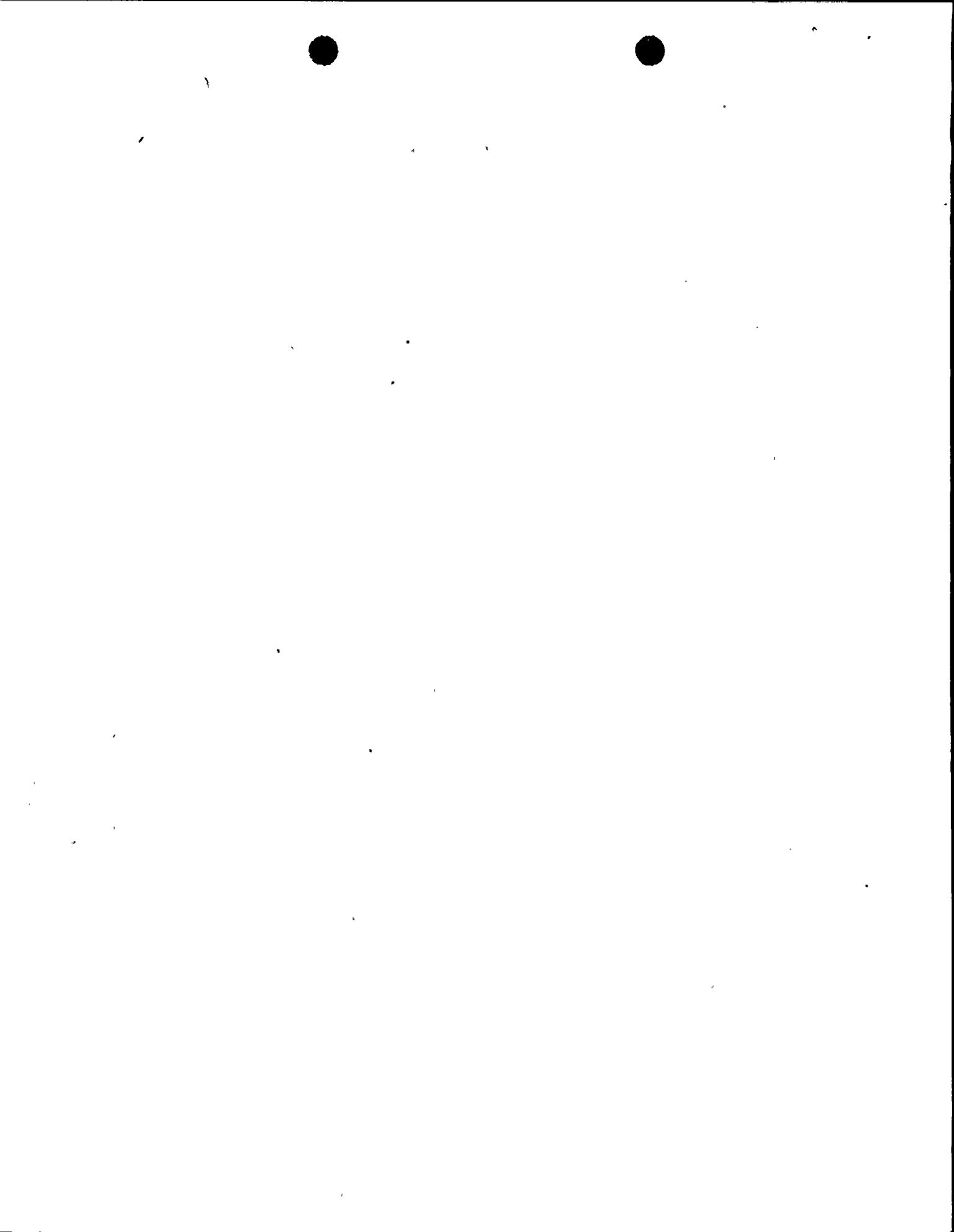


If you do not know these routes, please contact Westinghouse and/or the trucking firm and get the routes from them.

7. With respect to the seismic qualification of Category I and Category II systems, components, and equipment which are in the neighborhood of those areas where the fresh fuel assemblies will be unloaded, repaired, and stored, please identify those which have been determined by PG&E to be capable of retaining their physical integrity and function in the presence of an earthquake of extended period which would produce a ground acceleration of
 - A. 0.40g
 - B. 0.45g
 - C. 0.50g
 - D. 0.55g
 - E. 0.60g
 - F. More than 0.60g
8. Please answer interrogatory no. 7 with respect to NRC Staff qualification.
9. Please indicate which of those items identified in interrogatory no. 7 have not been qualified by NRC Staff at the level of
 - A. 0.40g
 - B. 0.50g

NOTE: Due to numbering error, interrogatory no. 21 follows no. 9, i.e., interrogatories 10 to 20 inclusive do not exist.

21. If it is necessary to have the fresh fuel assemblies (FFA) on site, in storage racks, a certain number of days prior to fuel loading of Unit 1 please indicate
 - A. The precise number of days required
 - B. The specific inspections, operations, etc., that necessitate this number of days.
22. Please provide statistics on all Westinghouse 15 X 15 FFA delivered to all U.S. reactors, that indicate the nature, degree, and frequency of defects serious enough to require repairs. Indicate time required for each repair.
23. If question 22 is not answered in its entirety please set forth basis for objection.
24. Production of Documents: MFP requests PG&E to send them, or make available for inspection and/or photocopying at San Luis Obispo, Calif., copies of all contracts and amendments thereto, between PG&E and Westinghouse relevant to purchase or lease of fresh fuel assemblies. Please also identify specific location(s) of penalty clauses occasioned by late acceptance of fresh fuel assemblies due to any cause whatsoever.



25. Please identify by title, author, affiliation of author, and date, all manuals, procedures handbooks, documents, or communications, pertaining to FFA receipt, unloading, inspection, repair, criticality precautions, and storage, which are to be used at Diablo.
26. Production of Documents: Please provide Intervenor with copies of all documents, cited in question 25, for inspection and/or photocopying, at your San Luis Obispo office.
27. Are unit 2 FFA the same as unit 1 FFA in the sense that they can be interchanged?
 - A. If yes, is there any reason why they can't be used for unit1? Indicate reason, if any.
 - B. If no, set forth differences.
28. Please indicate with specificity the inconvenience, if any, to PG&E, occasioned by PG&E receipt of initial FFA at a date after June 16, 1975.
29. If the ASLB were to grant the MFP Motion dated April 10, 1975 please indicate in detail the inconvenience which would be realized by PG&E. Please try to be accurate and complete.
30. Please identify by name and address the trucking company which is scheduled to bring FFA here from the fabricator.
31. In accordance with existing contracts, when does PG&E acquire the FFA, e.g., at the Westinghouse shipping dock; on being unloaded at the Diablo site? Please be specific.
32. How many FFA will be loaded into each shipment container?
33. How many shipment containers will be carried by each truck?
34. How long will it take to bring a single truckload of FFA to the site from Columbia, South Carolina?
35. Please cite by name and identify by function, all pipes, tubing, hoses, conduits, containers, pools, tanks, in and around the Fuel Handling Building which, prior to startup, are designed to carry or hold
 - A. Fresh water
 - B. Sea water
 - C. Boarated water (give concentrations in ppm)
 - D. Steam
 - E. Gas other than steam (identify)
 - F. Nothing
36. Is Mr. Barton W. Shackelford, Registered Civil Engineer No. 7306 in the State of California, responsible for the design and construction



of the facilities at Diablo Canyon units 1 and 2, which were or are being constructed based on building permits issued by San Luis Obispo County?

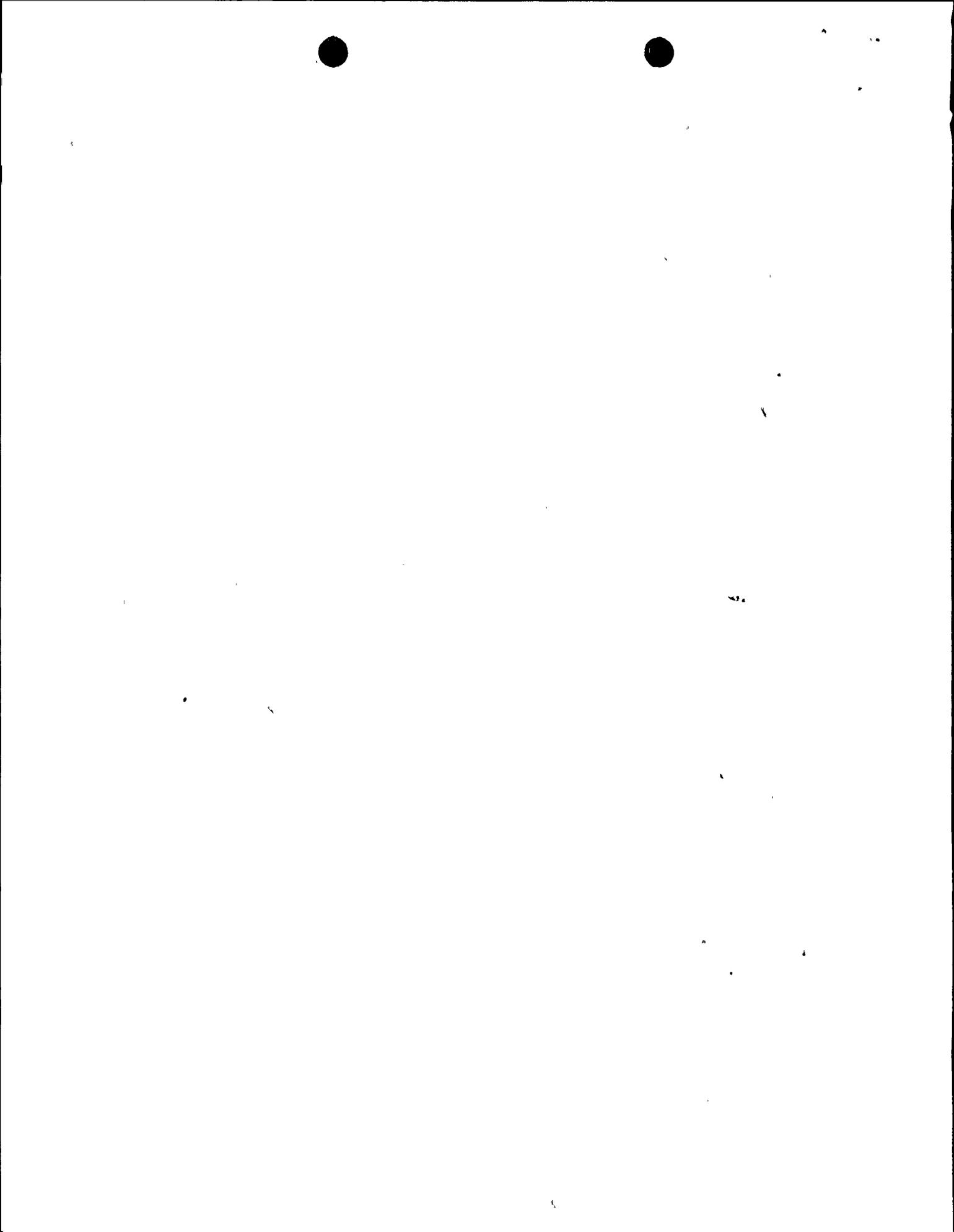
- A. If yes, provide his address
 - B. If no, identify by name and address the responsible Registered Civil Engineer.
37. Name the person or persons responsible for the review of the "Seismic Evaluation of the Diablo Canyon Site" prepared by Hugo Benioff and transmitted to Mr. Gordon V. Richards under dates of January 9, 1967, and May 28, 1968.
 38. State the nature and extent of the review which was made, including the number of man hours spent by each person or persons involved in the review referred to in question no. 37.
 39. Name the person or persons responsible for the review of the "Recommended Earthquake Design Criteria for the Nuclear Power Plant -- Unit 2, Diablo Canyon Site" transmitted to Mr. Gordon Richards from John Blume and Associates, Engineers, under date of June 24, 1968. Said report is dated June 1968.
 40. State the nature and extent of the review which was made, including the number of man hours spent by each person or persons involved in the review referred to in question no. 39.
 41. On or about December 27, 1974, PG&E submitted to the Atomic Energy Commission Staff a report which purportedly reviewed the capacity of the Diablo Canyon facilities' ability to resist Design Earthquakes with maximum accelerations in excess of the 0.2G for the Design Earthquake (DE) and in excess of 0.40G for the Double Design Earthquake (DDE). Furnish a copy of that report and in addition, furnish a copy of the response of AEC Staff to the report.

Discussion

The following discussion has been prepared to make certain that there is no misunderstanding regarding the nature and extent of the information requested in item no. 42 below.

- A. The Construction Drawings should include, but not be limited to those drawings upon which building permits were issued by the County of San Luis Obispo. The drawings should contain the usual "as built" notations which reflect changes or modification of original Construction Drawings.
- B. The Specifications should include, but not be limited to those Specifications upon which building permits were issued by the County of San Luis Obispo.
- C. The Design Calculations should include but not be limited to those upon which building permits were issued by the County of San Luis Obispo. Design Calculations include all calculations which were prepared to demonstrate the capacity to resist the effects of the Design Earthquake (DE) and the Double Design Earthquake (DDE).

Computer runs are considered calculations. Computer runs should be accompanied by a complete description of the



computer program, including all assumptions made which are a part of the program.

- D. Items 42-D, E, and F refer to and include, but are not limited to, the Spent Fuel Pool Cooling System, the Auxiliary Saltwater System, the Service Cooling Water System and the Component Cooling Water System.
 - E. Furnish complete details, test data and reports of model or full scale vibration and/or shake table testing which was performed in order to demonstrate the capacity to resist the effects of the DE and/or the DDE for items 42A through 42I inclusive.
42. Furnish a complete set of Construction Drawings, Specifications, and Design Calculations for Diablo Canyon Units 1 and 2 from which the following were constructed:
- A. The Fuel Handling Building which houses the Spent Fuel Pool.
 - B. The Design Class I Tanks which store water and are adjacent to the Fuel Handling Building.
 - C. The overhead crane in the Fuel Handling Building, including any auxiliary equipment used in the handling of fuel assemblies.
 - D. All piping and equipment which carries water in or around the Fuel Handling Building.
 - E. All piping control equipment including valves for the piping which carries water in or about the Fuel Handling Building.
 - F. All instrumentation and electrical equipment which control the water piped in or around the Fuel Handling Building.
 - G. The New Fuel Storage Racks. Refer to FSAR Section 9.1
 - H. The Fuel Handling System. Refer to FSAR Section 9.1
 - I. The Fuel Rods and Fuel Assembly. Refer to FSAR Section 4.2
43. Identify by name and current address, the engineer (a) who designed the fresh and spent fuel racks and (b) who reviewed the design.
44. With respect to the fresh and spent fuel rack design, please set forth the nature and extent of review (in hours) by
- A. PG&E engineers
 - B. Westinghouse engineers
 - C. County of San Luis Obispo (or their consultant - please identify)
 - D. AEC/NRC Staff
 - E. Others
45. Please identify by model number, manufacturer, manufacturer's address, and specific function, all instruments used to detect, record, process signals due to strong ground motion at the Diablo site.



46. Reference FSAR p. 1.5-37 (Amend. 22) last line of page. Please indicate source, date, and method of cited verification of the adequacy of the 17 X 17 fuel assembly.
47. Please identify seismic design class of the four large water tanks immediately adjacent but external to Fuel Handling Building. If any are founded on fill, please indicate depth of fill for each tank. DISCOVERY REQUEST: Please provide intervenor with Reference 1, FSAR, p. 3.7-29.
48. Reference FSAR p. 4.2-24, 2nd par. Please give precise weight and beam stiffness coefficients of referenced 15 X 15 fuel assembly and 17 X 17 assembly.
49. For two 17 X 17 fresh fuel assemblies of 3.5% enrichment, without control rods or burnable poison rods, fully immersed in cold clean water, with longitudinal axes parallel, and in most reactive geometry, i.e., contacting each other lengthwise, provide the value of effective K.

