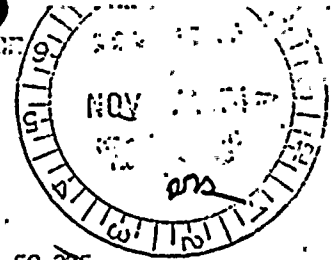


U.S. Atomic Energy Commission
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of
Pacific Gas & Electric Co. }
Diablo Canyon, Units 1 & 2 }

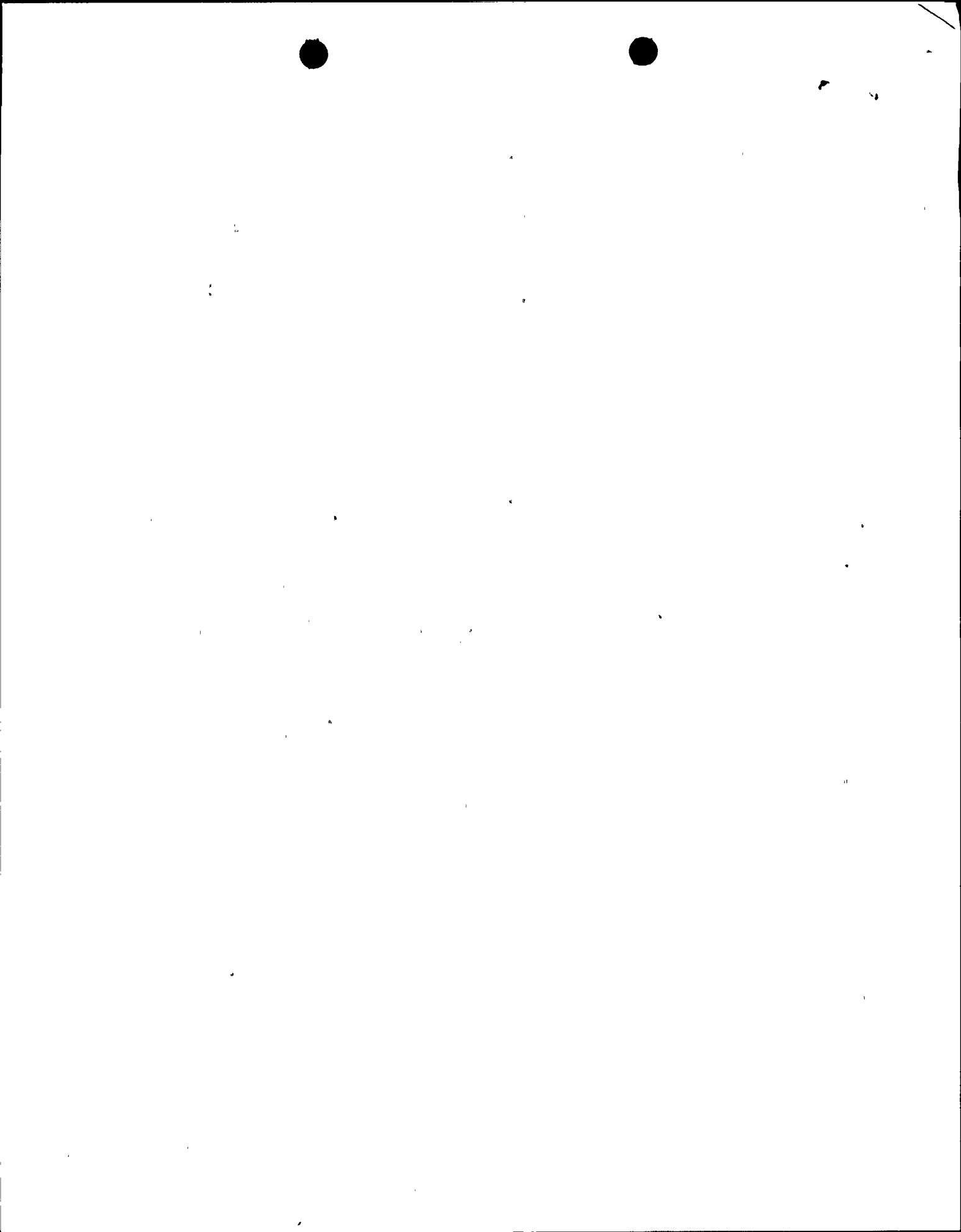
AEC Docket Nos. 50-275
50-323

INTERROGATORIES FURNISHED BY
SAN LUIS OBISPO MOTHERS FOR PEACE
OF AEC REGULATORY STAFF

San Luis Obispo Mothers For Peace (MFP) submits the following interrogatories to be answered under oath by such AEC personnel as may have knowledge of the facts, in accordance with 10 CFR Part 2 and specifically including 10 CFR 2.720 (h)(2)(ii). References in this interrogation to "AEC" are to the Atomic Energy Commission, including its officers, employees, and consultants.

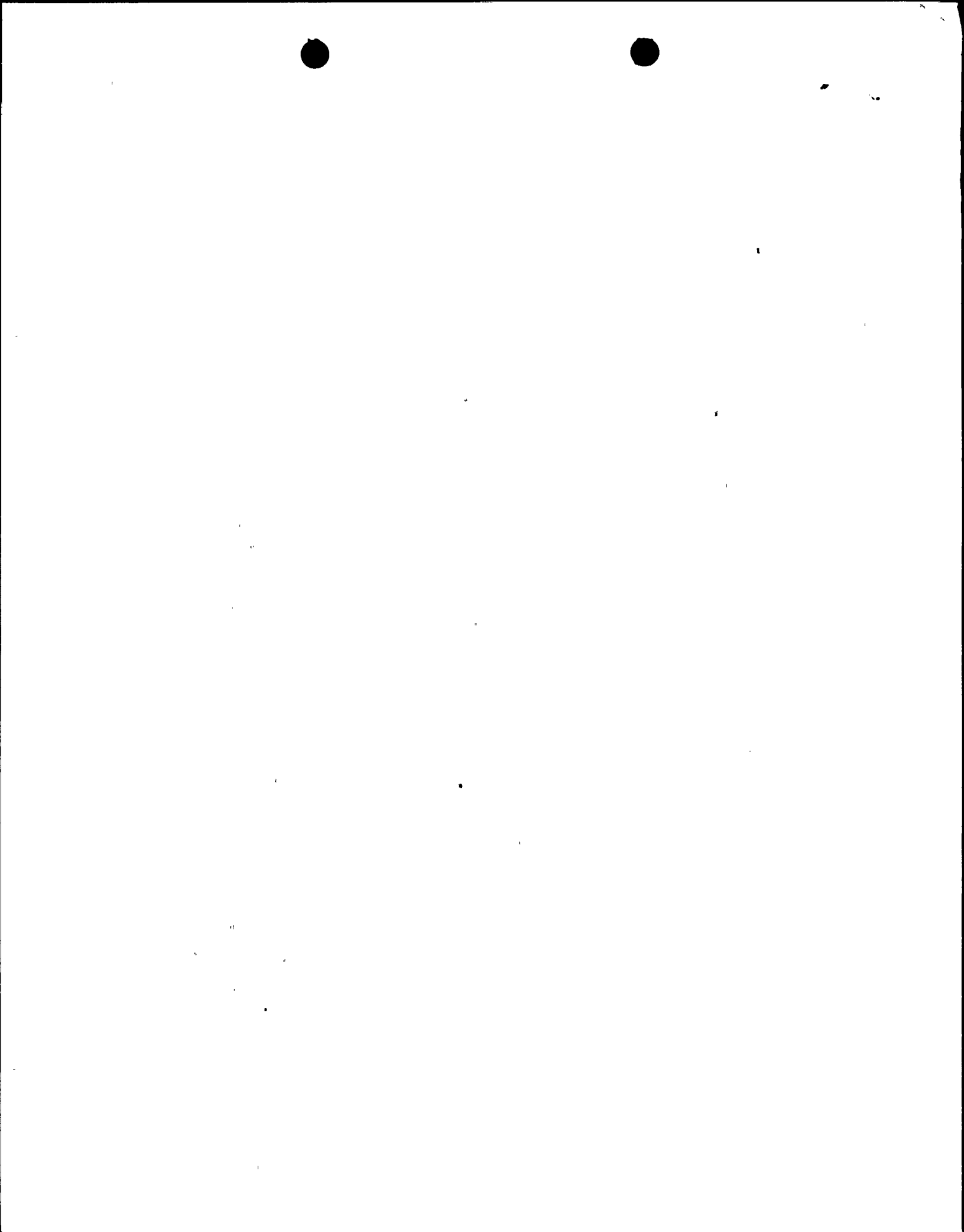
1. Identify by title, author, date, and agency, if applicable, all studies, reports, memoranda, correspondence, and other documents pertaining to the seismic environment of the Diablo Canyon Power Plant, Units 1 and 2,
 - A. Which are completed.
 - B. Which are in progress.
 - C. Which are projected for the future.
2. Identify by title, author, date, and agency, if applicable, all studies, reports, memoranda, correspondence, and other documents pertaining to the adoption of the 0.40 g Double Design Earthquake criterion for Diablo Class I structures, systems, and components which are
 - A. completed
 - B. in progress
 - C. projected for the future
3. Please set forth, and briefly explain, the major problems which the AEC feels are now either unresolved, not understood well enough, or otherwise outstanding and preventing the power ascension and subsequent routine operation of Diablo Units 1 and 2.
4. Please identify all plants in the United States which, for commercial power reactors, currently
 - A. reprocess spent fuel
 - B. accept spent fuel for interim storage
5. What would the AEC do, with respect to AEC-licensing of the Diablo facilities, if it were conclusively demonstrated that existing faults were not incapable of producing ground accelerations at the site in excess of 0.40 g?
6. Please set forth the basis for AEC's conclusion that short ground acceleration peaks, in excess of 0.40 g, would not cause failure of Class I systems and components.
7. What possibility exists, in AEC's estimation, that peak accelerations in excess of 0.40 g might be experienced at Diablo due to seismic activity
 - A. on the San Andreas Fault

H-4



B. on the Hongri Vault Bone

8. Describe the mechanical and/or mathematical model which lead to the AEC response to interrogatory no. 7.
9. Noting that Highway 101 provides the only two useable exits from the City of San Luis Obispo, please set forth the AEC's basis for assuming evacuation of the city is possible in the case of a nuclear disaster at Diablo, during unfavorable wind conditions.
10. Please set forth the AEC's criteria for defining a successful population evacuation. Please quantitate.
11. What specific improvements in PWR design significantly differentiate PG&E's Units 1 and 2 from the model dispersion study tabulated at page 31 of TID-14844?
12. Is the AEC aware of any method by which the chief onsite emergency coordinator can obtain promptly off-site meteorological data immediately after a radioactive calamity?
13. If answer to no. 12 is yes, please set forth such methods.
14. If answer to no. 12 is no, please set forth basis for AEC's lack of concern.
15. Set forth AEC's basis for postulating that a PWR pressure vessel rupture with subsequent release of radioactivity of catastrophic proportion is impossible, or of a probability so small as to be considered effectively impossible.
16. Please describe the danger to the public health and safety that would obtain if a vehicle, carrying several large emplacements of dynamite, were to accelerate into the most dangerous section of the spent fuel storage building, assuming that a large but reasonable number of spent fuel assemblies were cooling off in the pool.
17. Will the AEC provide MFP, without an order, with the PERT schedule for documents on Diablo Canyon Units 1 and 2, and will it continue to provide us with prompt updates of the schedule?
18. Please set forth the expected completion dates for the geology, seismology, and hydrology portions of the Staff's Safety Evaluation.
19. Will the AEC allow the onsite storage of fresh fuel assemblies before the seismology portion of the Safety Evaluation has been completed?
20. According to FSAR Table 1.3-1, Zion Units 1 and/or 2 have been used for design comparison with Diablo Units 1 and/or 2. If this is true, then with respect Zion 1 and/or 2, commencing with fuel loading,
 - A. List any incidents or occurrences requiring Regulatory notification giving dates and descriptions.
 - B. List all incidents or occurrences that caused (1) a shutdown, and (2) a scram, of Units 1 and/or 2.



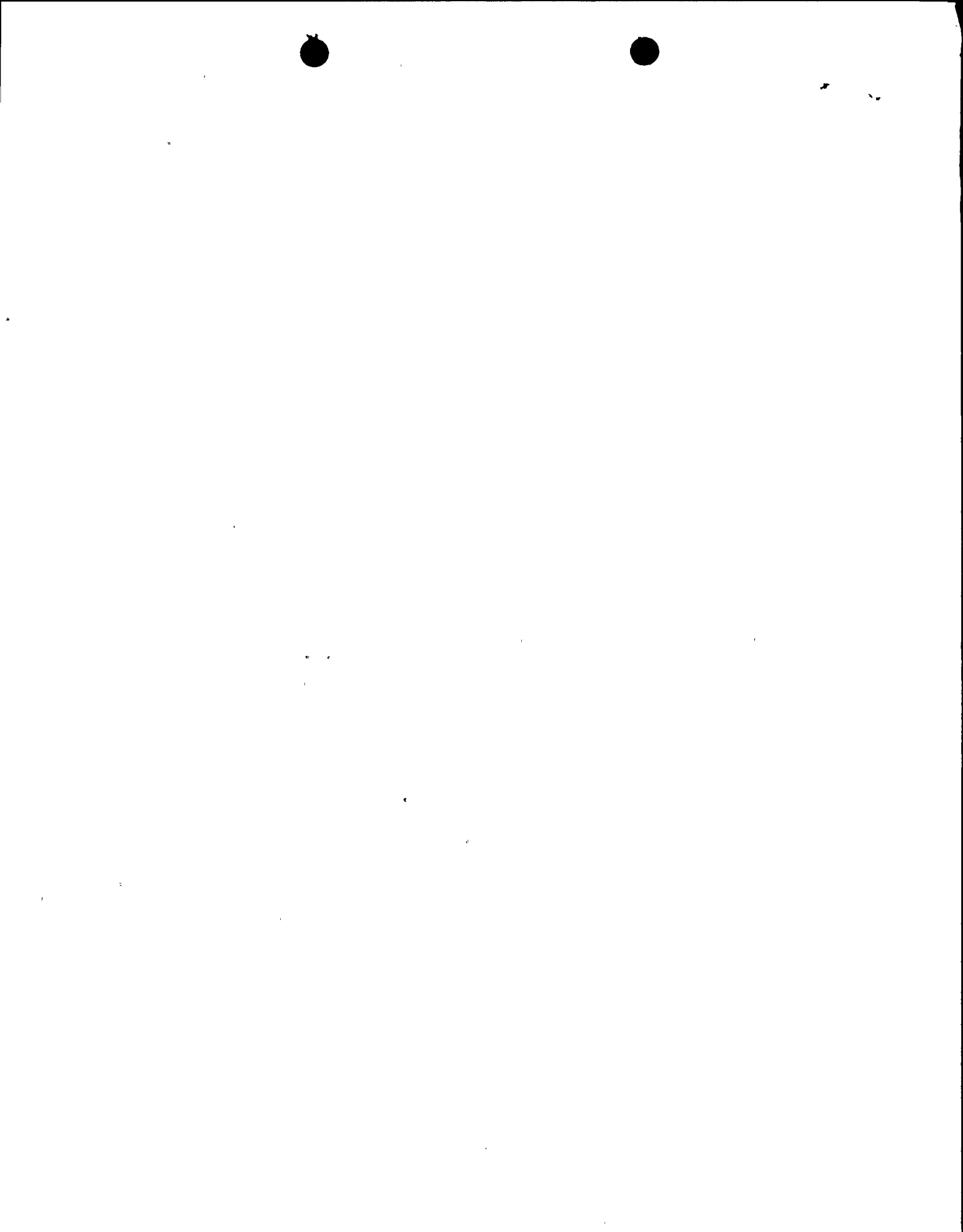
- C. With respect to no. 20B; give duration of each listed shutdown.
D. Explain the nature of each problem that caused each shutdown or scram referred to in no. 20B and explain how the Diablo design will decrease the frequency of occurrence of these problems.
21. With respect to Diablo's 17X17 fuel array, please identify all reactors that you know of that
A. Have used a 17 X 17 array
B. That use a 17 X 17 array
C. That will use a 17 X 17 array.
22. Give dates of operation for all entries, if any, in your response to interrogatory No. 21.
23. Please set forth all problems, of which the AEC is aware, which are, or might be, associated with the use of the 17 X 17 arrays cited in your response to interrogatory no. 21.
24. Please list causative errors or common mode failures which could, conceivably, lead to the existence of a critical geometry in the spent-fuel pool.
25. Please discuss the consequences of the existence, in the spent-fuel pool, of a critical geometry.
26. Is it necessary, in AEC's estimation, for P.G. and E. to perfect its rights in the Northern Evacuation Route from the plant site? Please explain and provide basis for answer.
27. Does 10 CFR or other AEC regulations contain retrofitting requirements for utilization facilities, in the event that a significant fault is discovered subsequent to establishment of Class I seismic criteria? Please respond in light of the recently-discovered Hayward Fault Zone.

Sandra A. Silver

Sandra A. Silver

1315 Cecelia Ct.
San Luis Obispo, CA 93401

Dated: October 29, 1974



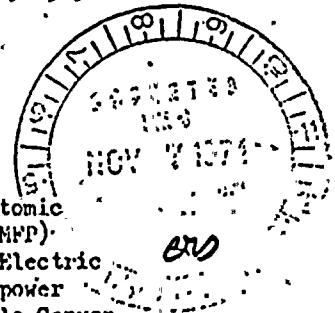
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

AEC Dockets 50-275-OL
50-323-OL

RELATED CORRESPONDENCE

SUPPLEMENT TO MOTION OF SAN LUIS OBISPO
MOTHERS FOR PEACE
FOR IMPOSITION OF A STOP WORK ORDER



1. By motion dated October 14, 1974 and filed with the presiding Atomic Safety and Licensing Board, San Luis Obispo Mothers for Peace (MFP) requested that a stop work order be imposed on Pacific Gas and Electric Co. (P.G.&E.) and its contractors, and applying to the nuclear power plant, units 1 and 2, and related facilities at and around Diablo Canyon, as well as the transmission lines extending from the plant.
2. To supplement the substantive issues submitted to the Board, MFP herewith transmits STATEMENT OF DR. DAVID CHIPPING dated October 27, 1974. Dr. Chipping, a geologist, teaches the courses in earthquakes at California Polytechnic State University, San Luis Obispo.
3. Regarding PG&E's position with respect to our Motion for Stop Work, it is noted that their opposition, as set forth in their Answer dated October 23, 1974, is nothing more than a simple procedural attempt to dismiss our motion. It is hoped that this type of argument will not be entertained nor allowed to dominate licensing matters and decisions in these proceedings.
4. The MFP Motion of October 14, 1974 is not based on the discovery of a 10-foot subterranean scarp, but on the existence of the recently U.S.G.S.-documented giant 90-mile Hogri Fault Zone. This massive and active (capable) region may contain enough potential energy to level the Diablo Canyon facilities as well as schools, hospitals, and other structures in the California Central Coast region. We are dismayed to learn that PG&E wishes our motion denied on purely formal grounds. Thus it cannot be said, by means of any mental excursion, that the MFP Motion is a "rehash" (sic) of a similar pleading.
5. We do however, agree with PG&E's assertion that there is no need for a separate hearing at this time. Our position is that the Board should, at this juncture, issue a stay of construction order, on the basis of the now existent geological data. The termination of the stay could, if PG&E so desired, be appropriately considered during the operating license hearing.

Sincerely yours,

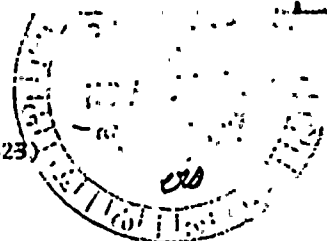
Sandra A. Silver

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

Dated: October 28, 1974

Enclosure: Statement of Dr. David Chipping





(Re: Diablo Canyon Site, Units 1 & 2; Dockets 50-275 & 50-323)

STATEMENT OF DR. DAVID CHIPPING

1. It is my understanding that the Double Design Earthquake (DDE) postulated in 1967 or thereabouts, was determined to produce a maximum ground acceleration at the Diablo Canyon Nuclear Power Plant facilities of 0.40 g.

2. The 0.40 g figure was based on postulated earthquakes occurring on the San Andreas, other then-known faults, and at depth but not necessarily along known surface ruptures.

3. The 90-mile Hosgri fault zone, whose existence has recently been documented by the U.S.G.S., was not considered with respect to seismic design criteria, and calculation of the DDE.

4. Seismic activity in the region occupied by the fault is probably responsible for a magnitude 2.9 quake felt at the power plant site on September 24, 1974. In 1916 (December 1) a larger shake was felt at Avila Beach, having a possible intensity of VII on the Modified Mercalli Scale. The Berkeley BTRETRV printout of historic quakes describes falling plaster, toppled refinery chimneys, toppled shelves in stores, and disturbed water in San Luis Bay. Although difficult to translate this into a ground acceleration value, it may well have exceeded 0.4 g.

5. The Hosgri fault zone is sub-parallel to the San Andreas fault zone, and therefore a likely site for ongoing right-lateral shear between the North American and Pacific Plates. The small amount of seismic activity actually recorded from the zone does not necessarily indicate that there is no potential danger from future quakes. An illustration of this comes from the area of the 1857 break along the San Andreas fault, which after becoming the site of California's largest quake, has remained seismically quiet.

6. Therefore, it now appears that the Hosgri fault zone, two miles from the Diablo site at its point of nearest approach is, potentially, a generator whose existence should be taken rather seriously with respect to the calculation of the DDE, and possibly to tsunami generation.

7. Credentials and Identification:

Dr. David Hugh Chipping

B.A. (Hon) Geology, Cambridge University, England, 1965.

M.S. Geology, Stanford, 1967.

Ph.D. Geology, Stanford, 1970.

Lecturer in geology, University of California at Davis, 1968-1971.

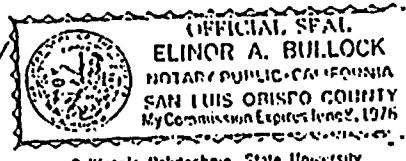
Assistant Prof. in Geology, Physics Dept., California Polytechnic State University at San Luis Obispo, 1971-present.

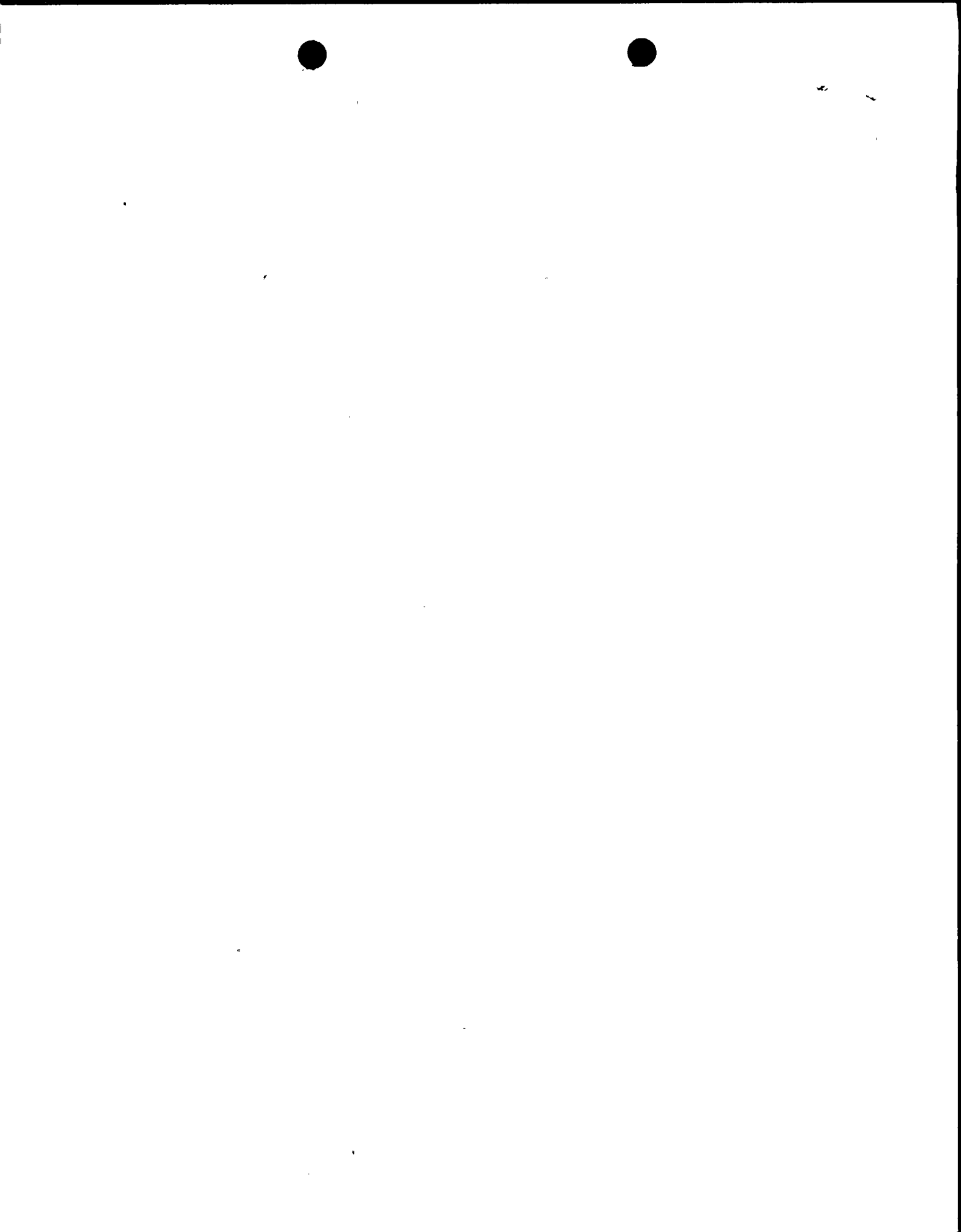
Signature:
D.H. Chipping
Date: 11/24/74

Subscribed and sworn to before me this

23rd day of *October* 19*74*

Elinor A. Bullock Notary Public
State of California - Principal Office, San Luis Obispo County





RELATED CORRESPONDENCE

U.S. ATOMIC ENERGY COMMISSION

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

AEC Dockets 50-275-01,
50-323-01.

CERTIFICATE OF SERVICE

The Supplement to Motion of San Luis Obispo Mothers For Peace For Imposition of a Stop Work Order (dated October 28, 1974) with enclosure, and the Interrogatories Propounded by San Luis Obispo Mothers For Peace of AEC Regulatory Staff (dated October 28, 1974), have been served today, on the following:

Elizabeth S. Bowers
Richard L. Black
Glenn O. Bright
William P. Cornwell
Philip A. Crane, Jr.
Frederick Eissler



John Forster
William D. Martin
Richard S. Salzman
Secretary, U.S.A.E.C.
Andrew Skaff
Lonnie Valentine

Sandra A. Silver
Sandra A. Silver

Dated: October 29, 1974

RECEIVED
74 NOV 5 AM 11:23
OFFICE OF THE SECRETARY



11-11-54