UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechoefer, Chairman Dr. Jerry R. Kline Frederick J. Shon DOCKETED

'93 MAR 12 P3:44

OFFICE OF SECRETARY SOCKETING & SERVICE BRANCH

In the Matter of

PACIFIC GAS AND ELECTRIC COMPANY (Diablo Canyon Nuclear Power Plant, Units 1 and 2)

Facility Operating Licenses No. DPR-80 and DPR-82 Docket Nos. 50-275-OLA-2 50-323-OLA-2

ASLBP No. 92-669-03-OLA-2

(Construction Period Recovery)

March 8, 1993

Intervenor San Luis Obispo Mothers for Peace
Third Set of Written Interrogatories
and Requests for the Production of Documents
to Pacific Gas and Electric Company

Pursuant to the Atomic Safety and Licensing Board ("the Board") Order of January 21, 1993, in this docket, and pursuant to 10 CFR 2.740b, Intervenor San Luis Obispo Mothers for Peace ("MFP") hereby propounds written interrogatories and requests for the production of documents, contained in Attachment A hereto, to be answered by licensee Pacific Gas and Electric Company ("PG&E") under oath or affirmation according to the schedule established by the Board. The responses to the interrogatories should conform to the instructions and definitions contained in Attachment A to the previous set of written interrogatories and requests for the production of documents.

Respectfully Submitted,

ancy Culve

Nancy Culver

San Luis Obispo Mothers

for Peace

ATTACHMENT A

Interrogatories Related To Contention 1: Maintenance and Surveillance

- As used in the DCNPP maintenance procedures, please define the terms: (1)
 Important to Safety, (2) Important to Environmental Qualification, (3) Quality
 Related
- 2. Please describe how the master list of items subject to Preventive Maintenance (as described in NPAP C-40, p. 2) is used by each of the separate PM programs at DCNPP. Who maintains control over the accuracy and completeness of the master list? Who decides when the frequency of a PM activity is to be altered? What is the Importance classification of the list? Please provide a copy of the latest version of the list.
- Please provide a copy of Procedure NPAP D-756 related to Maintenance of Environmental Qualification.
- Please provide a copy of Procedures NPAP C-3, and C-6 related to Post-Maintenance Testing.
- 5. Has there been an occurrence at DCNPP of inadequate control of jumpers and bypasses after maintenance or surveillance activities? What is the frequency of occurrence during each year of operation of DCNPP?

- 6. Please describe the activities and documentation governing tailboard briefings (e.g. NPAP C-40 mentions them at p.11). Where in the procedures are the functions of tailboard briefings defined? Please provide a copy of the applicable procedures.
- 7. While the procedures allow for deviations from the written procedures in certain conditions (e.g. NPAP C-40, p. 11), how is permission to implement such leeway decided for any particular worker?
- Please provide one complete current copy of Action Requests/Quality Plant Problem Reports.
- 9. Please define the criteria that are used in deciding when and how to implement and when and how to stop implementing the portion of NPAP C-40 pps. 14 and 15 which refer to situations such as "[i]f evidence indicates that a significant number of common components in safety-related systems have performed unsatisfactorily, corrective measures shall be planned..."and "[i]f deemed necessary, an augmented testing and inspection program should be implemented following large scale component replacement (or repair) until such time as a suitable level of performance has been demonstrated." Who is responsible for defining these criteria and who is responsible for implementing and documenting the decisions made using these criteria?
- 10. How is the split of trade responsibilities implemented when there are multiple disciplines requires in the maintenance or surveillance of a single component. Please illustrate your answer by considering a hypothetical unit involving electronic components, a computer programmable logic control element, electrical actuators, mechanical processes and piping. How is the activity coordinated between the

mechanical, electrical and instrumentation & control maintenance programs?

Which discipline is given lead responsibility and how is this decided? Which discipline is accountable for maintenance of software or firmware functions? If the activity involves testing or changing some aspect of the software/firmware functions of a hypothetical controller or system, how are all aspects of the functionability of the unit verified at the end of the maintenance or surveillance activity?

- 11. What disciplinary action is taken, if any, for maintenance personnel who inadvertently cause trips or other misoperation of systems as a result of maintenance or surveillance activities? What tracking or documentation is made of who caused such actions?
- 12. What action is taken to verify proficiency of maintenance personnel to perform complex tasks on safety-related and important-to-safety equipment? How often is this verified?
- 13. What actions do personnel take to locate and identify the effects of aging of components? What aging effects are not detectable by visual or physical inspection during maintenance or surveillance activities? What methods are used to detect non-visible effects resulting from aging?
- 14. How do you detect the effects of erosion/corrosion on safety related components or non-safety related components in the vicinity of safety-related components?
- 15. How do you insure the environmental qualification of a component has not been effected by the actions of maintenance or surveillance? What tests do you employ to assure the Environmental Qualified life of an item has not been effected?

- 16. In implementing the secondary objective of the Preventive Maintenance Program of the Maintenance Department (AP C-750, p. 1)which is "to optimize the relationship between operating costs and the equipment's contribution to profit..." what measures of the "operating costs" and the "contribution to profit" are available to the maintenance personnel for use in making decisions related to this objective? Please provide sample copies of the data and/or measures used in these decisions.
- Please provide the procedures for conducting the cost/benefit analysis discussed as one of the criteria for evaluating the scope and frequency of specific PM tasks (AP C-750, p. 4).
- 18. Does the Maintenance Department or other DCNPP organization conduct any analyses of the trends in overdue PM activities? Provide a copy of such analyses for as many of the last four years as they may be available. Please provide a hard copy of the most recent quarterly report of overdue PM activities sorted by priority.
- 19. Please explain the grace period concept for rescheduling overdue PM activities (as discussed in AP C-450, p. 9). Verify that this concept does not extend the required end date or any other intervals such as those established by tech specs? What criteria were used in deciding that "overdue PM tasks may be rescheduled within a grace factor of 1.25" as opposed to any other value?
- 20. What actions are taken to protect software or firmware from the existence of computer virus which may be undetectable through normal means but may represent a potential misoperation of the device controlled by the software or firmware?

- 21. For the PM programs related to the Mechanical, the Electrical and the Instrumentation and Control Departments, state the approximate percentage of time for maintenance personnel spent in the following activities:
 - (a) scheduling maintenance;
 - (b) planning maintenance;
 - (c) performing maintenance;
 - (d) documenting maintenance.

Please answer the same questions for surveillance.

 Please provide a complete copy of <u>ALAB-763</u>, March 20, 1984, including the reference cited on page 1-1 of the Pacific Gas & Electric Company Q-List.

Interrogatories Related To Contention V: Fire Watches and Thermo-Lag Fire Barrier

The following interrogatories are to be answered under oath or affirmation by each person who is performing or has performed fire watches as compensatory actions for the following areas at Diablo Canyon Nuclear Power Plant, Units 1 and/or 2, containing Thermo-Lag fire barrier materials: (a) Fire Area 5-A-4, Unit 1 480 V Switchgear Room; (b) Fire Area 5-B-4, Unit 2 480 V Switchgear Room; (c) Fire Area 30-A-5, Units 1 and 2 Intake Structure; (d) Fire Area 10, Unit 1 12-kV Switchgear Room; and (e) Fire Area 20, Unit 2 12-kV Switchgear Room. The time period for this request may be limited to the period from the receipt by PG&E of NRC Bulletin 92-01 (identified by PG&E in its July 29, 1992, letter to NRC as June 24, 1992) to the present. The request specifically includes both employees of PG&E as well as employees of companies engaged by PG&E for the purpose of performing such fire watches.

- 23. Please state your name, position, employer, and business address.
- 24. Please indicate the inclusive periods during which you performed fire watches at Diablo Canyon Nuclear Power Plant, Units 1 and/or 2, within the conditions set forth above.
- 25. Please indicate, for the inclusive period identified above, when you received training for the duties which you performed. In addition, please indicate who provided the training (i.e., PG&E or some other organization). The word "training" includes both original and refresher or requalification training.
- 26. Please identify the procedure(s) which you used in performing the fire watches within the conditions set forth above, and provide copies of the procedure(s) (including completed checklists for all fire watches, to the extent that such checklists were used).
- 27. Please identify (by date, fire area, and unit) any missed or late fire watches within the conditions set forth above, and copies of documents which record occurrences of missed or late fire watches.
- 28. Please identify any open fire area doors which you identified during the course of your fire watches within the conditions set forth above, and provide copies of documents which record occurrences of open fire doors.

- 29. Please identify any discrepant conditions which you noted during the course of your fire watches within the conditions set forth above, and provide copies of any documents which record those discrepant conditions.
- 30. Please describe any duties which you have performed while assigned to fire watch duties which are unrelated to fire watch duties, identifying when the other duties were performed and at whose instructions or directions these duties were performed.

Certificate of Service

I hereby certify that copies of the foregoing Intervenor San Luis Obispo Mothers for Peace First Set of Written Interrogatories and Requests for the Production of Documents to the NRC Staff, Second and Third Sets of Written Interrogatories and Requests for the Production of Documents to PG&E have been served upon the following persons by U.S. mail, first class.

Office of Commission Appellate Adjudication U.S. Nuclear Regulatory Commission Washington, DC 20555

Administrative Judge Charles Bechhoefer, Chairman Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Woshington, DC 20555

Administrative Judge Jerry Kline Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

Administrative Judge Frederick J. Shon Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

Ann P. Hodgdon, Esq. Office of the General Counsel U.S. Nuclear Regulatory Commission Washington, DC 20555

Edward O'Neill Peter Arth, Jr. Trumon Burns Robert Kinosion Peter G. Fairchild, Esq. California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Joseph B. Knotts, Jr., Esq. Winston & Strown 1400 L Street, N.W. Woshington, DC 20005

Adjudicatory File U.S. Nuclear Regulatory Commission Washington, DC 20555

Secretory of the Commission Docketing and Service Branch U.S. Nuclear Regulatory Commission Washington, DC 20555

Robert R. Wellington, Esq. Diablo Canyon Independent Safety Committee 857 Coss Street, Suite D Monterey, CA 93940

Christopher Worner, Esq. Richard Locke, Esq. Pacific Gas and Electric Co. 77 Benle Street Son Francisco, CA 94106

Dated March 8, 1993, San Luis Obispo County, CA gel samtk

Jill ZomEk