In the Matter of

PACIFIC GAS AND ELECTRIC COMPANY

(Diablo Canyon Nuclear Power

Plant Units 1 and 2)

DOCKETED

1

2

3

4

5

7

8

9

10

12

13

15

16

17

19

18

20

21

22

24

25

26

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

86 OCT 23 P12:32

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF S

Docket Nos. 50-275 50-323-01-A

(Reracking of Spent Fuel Pools)

LICENSEE PACIFIC GAS AND ELECTRIC COMPANY'S
SECOND SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION
OF DOCUMENTS TO THE SIERRA CLUB

Pursuant to 10 CFR 2.740b, Licensee PACIFIC GAS AND ELECTRIC COMPANY hereby propounds the following interrogatories and document requests to Sierra Club on its Contentions I and II.

INSTRUCTIONS

- 1. All information is to be divulged which is in the possession of the individual, association, or corporate party, their attorneys, consultants, investigators, agents, employees, witnesses or other representatives of the named party.
- 2. Where you have incomplete information that precludes your fully answering an interrogatory, give such information as you have and state what information you do not have. If you are unable to give the information in the form sought but have the information aggregated differently, give the information in the form in which you have it and explain the reason for the deviation.
 - 3. When asked in the interrogatories below to identify or to give

2 her: 3 (a) full name; 4 (b) present job title, employer, and telephone number. 5 When asked in the interrogatories below to identify or to give 6 the identity of a document or writing, please give the following information 7 about the document: 8 (a) its title, if any; 9 (b) its nature (e.g., letter, memorandum, chart, computer 10 printout, ledger, notes, etc.); 11 (c) the date, if any, stated on the document; 12 (d) the identity of each person who signed it; 13 (e) the identity of each person to whom it is addressed; 14 (f) the present location of the document. 15 Where an individual interrogatory calls for an answer which 16 involves more than one part, each part of the answer should be clearly set out 17 so that it is understandable. 18 These interrogatories are intended as continuing interrogatories, requiring you to answer by supplemental answer, setting forth any information 19 20 within the scope of the interrogatories as may be acquired by you, your 21 agents, attorneys or representatives following your original answers up to the 22 time of hearing. 23 "Documents" include printed material, writings, calculations, 24 worksheets, handwritten notes, photographs, xerox reproductions, and audio or 25 video recordings. "Writings" and "recordings" consist of letters, words, or 26 numbers, or their equivalent, set down by handwriting, typewriting, printing,

- 2 -

the identity of a person, please give the following information about him or

1

2 3

4 5

6

9

10

12

14

15

16 17

18

19

20

22

23

24

25

photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation, as defined in Rule 1001 of the Federal Rules of Evidence, 28 U.S.C.

INTERROGATORIES

- 1. Please provide the freebody diagram and equations of motion used in developing the computer program presented in Appendix A (pp. 32, 33, and 34) to your Response dated October 3, 1986 ("Response") to PGandE's First Set of Interrogatories dated September 16, 1986.
- 2. In his time-history model (THM) (Response, p. 12), Dr. Ferguson assumes that "half the mass of fuel moves separately" from the rack. Please state each and every fact upon which that assumption is based.
- Please provide initial velocities and displacements used in developing the plots shown on Figure 1 and Figure 2 (pp. 29 and 30) of your Response.
- 4. Dr. Ferguson asserts (Response, p. 16) that "We have constructed a simple model which also results in rack displacements of several inches and which predict the maximum speed for a free rack to be of the order of 24 inches/second" (Page 16). Please provide plots of the displacement and velocity time-histories.
- 5. Dr. Ferguson asserts (Response, p. 19) that "A different expression for predicting fluid coupling forces between racks is currently being investigated" using Bernoulli's law. Please provide the assumptions and the form of Bernoulli's equation that are being used by Dr. Ferguson to develop hydraulic coupling effects.

111

111

6. Please provide a diskette of Dr. Ferguson's computer program presented in Appendix A (pp. 32, 33, and 34) of your Response.

Respectfully submitted,

BRUCE NORTON c/o P. A. Crane

ROBERT OHLBACH
PHILIP A. CRANE, JR.
RICHARD F. LOCKE
Pacific Gas and Electric Company
P. O. Box 7442
San Francisco, California 94120
(415) 781-4211

Attorneys for Pacific Gas and Electric Company

Bruce Norton

DATED: October 20, 1986

DOCKETER

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

'86 OCT 23 P4:52

In the Matter of

PACIFIC GAS AND ELECTRIC COMPANY

(Diablo Canyon Nuclear Power Plant Units 1 and 2)

Docket Nos. 090-275

(Reracking of Spent Fuel Pools)

CERTIFICATE OF SERVICE

I hereby certify that on October 20, 1986, copies of the following documents in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class: (1) LICENSEE PACIFIC GAS AND ELECTRIC COMPANY'S SECOND SET OF INTERROGATORIES AND REQUEST FOR PRODUCTION OF DOCUMENTS TO THE SIERRA CLUB.

B. Paul Cotter, Jr., Chairman Administrative Judge Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission 4350 East West Highway 4th Floor Bethesda MD 20814 Docketing and Service Branch Office of the Secretary U.S. Nuclear Regulatory Commission Washington DC 20555

Glenn O. Bright
Administrative Judge
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
4350 East West Highway 4th Floor
Bethesda MD 20814

Lawrence Chandler, Esq.
Henry J. McGurren, Esq.
Office of Executive Legal Director
U.S. Nuclear Regulatory Commission
Maryland National Bank Building
Room 9604
7735 Old Georgetown Road
Bethesda MD 20814

Dr. Jerry Harbour
Administrative Judge
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
4350 East West Highway 4th Floor
Bethesda MD 20814

Lewis Shollenberger Regional Counsel U.S. Nuclear Regulatory Commission Region V 1450 Maria Lane, Suite 210 Walnut Creek CA 94596

Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington DC 20555

Diane M. Grueneich Grueneich & Lowry 345 Franklin Street San Francisco CA 94102 Diablo Canyon Service List

Atomic Safety and Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington DC 20555

Mr. Lee M. Gustafson
Pacific Gas and Electric Company
1726 M Street NW Suite 1100
Washington DC 20036-4502

Janice E. Kerr, Esq.
Public Utilities Commission
5246 State Building
350 McAllister Street
San Francisco CA 94102

Nancy Culver 192 Luneta Street San Luis Obispo CA 93401

Dr. Richard Ferguson Vice-Chairman Sierra Club Rocky Canyon Star Route Creston CA 93432 Jacquelyn Wheeler 2455 Leona Street San Luis Obispo CA 93401

Laurie McDermott, Coordinator C.O.D.E.S. 731 Pacific Street Suite #42 San Luis Obispo CA 93401

Managing Editor
San Luis Obispo County
Telegram-Tribune
1321 Johnson Avenue
San Luis Obispo CA 93406

Richard E. Blankenburg Co-publisher Wayne A. Soroyan, News Reporter South County Publishing Company P. O. Box 460 Arroyo Grande CA 93420

Dr. Howard M. Fishman Franklin Research Center 20th & Race Street Philadelphia, PA 19103

Richard F. Locke Pacific Gas and Electric Company 77 Beale Street, 31st Floor San Francisco, CA 94106

Dated at San Francisco, California, this 20th day of October, 1986.