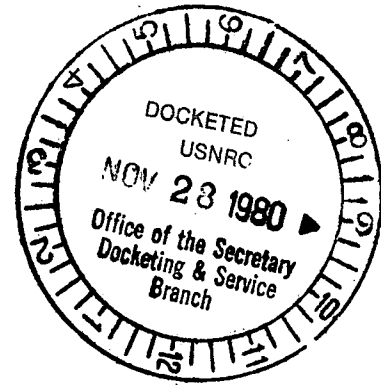


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and San Diego Gas & Electric Company

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket Nos. 50-361 OL
)	50-362 OL
SOUTHERN CALIFORNIA)	
EDISON COMPANY, et al.,)	SECOND SET OF INTERROGATORIES
)	TO INTERVENORS FRIENDS OF THE
(San Onofre Nuclear Generat-)	EARTH, MR. AND MRS. AUGUST
ing Station, Units 2 and 3))	CARSTENS, MR. AND MRS. LLOYD
)	VON HADEN, MR. DONALD MAY, AND
)	MRS. DONIS DAVEY

[10 C.F.R. §§ 2.740b]

TO INTERVENORS FRIENDS OF THE EARTH, MR. AND MRS. AUGUST
CARSTENS, MR. AND MRS. LLOYD VON HADEN, AND MRS. DONIS DAVEY
AND THEIR ATTORNEY OF RECORD:

Applicants in the above-entitled action hereby request
that you answer the following set of interrogatories under oath,
by an officer or authorized agent, within fourteen (14) days of
service hereof, pursuant to Title 10, Part 2, Section 2.740b of
the Code of Federal Regulations.

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INSTRUCTIONS AND DEFINITIONS

For purposes of these Interrogatories and your responses thereto, the following definitions and instructions shall apply:

(a) The terms "FOE, et al.," "you," or "your" refers jointly to the intervenors responding to these Interrogatories: namely, Friends of the Earth, Mr. and Mr. August Carstens, Mr. and Mrs. Lloyd Von Haden, and Mrs. Donis Davey.

(b) The term "Applicants" refers jointly to the proponents of these Interrogatories, Southern California Edison Company and the San Diego Gas & Electric Company.

(c) The term "person" means any natural person and any private or public entity of any nature, including without limitation, corporations, firms, partnerships, sole proprietorships, associations, groups, organizations, trusts and estates.

(d) The term "document" means:

(1) The original, or

(2) If the original is not in your custody or under your control, then a copy thereof.

(e) As used herein, unless the context otherwise requires, the singular number includes the plural and the plural includes the singular; the masculine gender includes the feminine, and the feminine includes the masculine.

(f) When you are requested to "identify" any document, you shall include in your response a description sufficient to satisfy the "reasonable particularity" requirement found in Title 10, Part 2, Section 2.741(c) of the Code of Federal Regulations,

1 including without limitation the following information with
2 respect thereto:

- 3 (1) The nature of the document;
- 4 (2) Its date;
- 5 (3) The names of its addressor(s) and
6 addressee(s), if any;
- 7 (4) The name(s) of the person(s) who prepared it;
- 8 (5) The name(s) and address(es) of the present
9 custodian(s) of the original and any copies thereof; and
10 (6) A summary of its contents.

11 In lieu of providing the information specified in Paragraph (f),
12 Items (1)-(6), you may attach to your responses to these
13 Interrogatories a true copy of such document, identifying the
14 Interrogatory to which it is responsive and stating in your
15 answer only such of the information specified in Paragraph (f),
16 Items (1)-(6) as does not clearly appear on the face of such
17 document.

18 If you claim a document is privileged or attorneys'
19 work product, describe the same generally and state all facts
20 upon which you base the claim of privilege or the claim such
21 document constitutes attorneys' work product.

22 (g) When you are requested to "identify" any person,
23 you shall set forth the full name and last known business
24 address, residence address, and employer of such person you are
25 asked to identify.

26 (h) The term "expert" refers to a person who by virtue
27 of his knowledge, skill, experience, training or education has
28 acquired a scientific, technical or specialized knowledge which

1 can assist the Nuclear Regulatory Commission Licensing Board in
2 understanding the evidence or determining a fact, opinion, or
3 scientific theory relevant to an issue in this proceeding.

4 (i) When you are requested to "identify" an "expert"
5 as that latter term is defined in Paragraph (h) above, you shall
6 set forth the full name and last known business address,
7 residence address, academic affiliations, and present employer of
8 each such "expert" you are asked to identify.

9 (j) In answering these Interrogatories, you shall
10 furnish all information available to you, your respective agents,
11 employees, investigators, representatives and attorneys, and not
12 merely such information as is known from personal knowledge.

13 (k) The term "SONGS 2 and 3" refers to the San Onofre
14 Nuclear Generating Station, Units 2 and 3.

15 (l) The term "SCE" refers to the Southern California
16 Edison Company.

17 (m) The term "NRC" refers to the United States Nuclear
18 Regulatory Commission.

19 (n) The term "FSAR" refers to the "Final Safety
20 Analysis Report, San Onofre Nuclear Generating Station, Units 2
21 and 3," which Applicants believe is currently available to the
22 public in the Public Documents Room of the Mission Viejo Public
23 Library.

24 (o) Where the Interrogatories ask whether Intervenors
25 have "analyzed" a document or subject, Applicants define
26 "analyze" to be where Intervenors have reviewed the document or
27 subject in the context of SONGS 2 and 3 and have submitted a
28 written report of that review.

1 (p) Offshore Zone of Deformation ("OZD") as used in
2 this proceeding is a hypothesized zone of deformation which as
3 defined by the United States Geological Survey ("USGS") consists
4 of the Newport-Inglewood Zone of Deformation, the South Coast
5 Offshore Zone of Deformation and the Rose Canyon Fault Zone.

6 (q) Structural Relationship - A close association in
7 terms of origin, tectonic style*, or of a common source in space
8 and time.

9 INTERROGATORIES

10 INTERROGATORY NO. 1

11 Define the following terms which have been used by you
12 in the four previous sets of interrogatories to Applicants:

- 13 (a) structurally related
14 (b) wrench fault
15 (c) wrench fault system
16 (d) wrench fault tectonics
17 (e) active tectonic system
18 (f) branch or splay
19 (g) seismic gap
20 (h) en echelon
21 (i) plate boundary

22 INTERROGATORY NO. 2.

23 For each of the terms listed in Interrogatory No. 1,

- 24 (a) Identify each and every document, written
25

26

*/ tectonic style: The total character of a group of related
27 structures that distinguishes them from other groups of
28 structures, in the same way that the style of a building or
an art object distinguishes it from others of different
periods or influences. (AGI, 1980)

1 authority or communication upon which you rely in defining each
2 term;

3 (b) Identify each and every person, expert of
4 otherwise, upon whom you rely in defining each term; and

5 (c) Identify any writings, opinions, or testimony of
6 the person(s) you have listed in Interrogatory 2(b) upon which
7 you rely in defining each term.

8 INTERROGATORY NO. 3:

9 Do you disagree with the following as an accurate
10 description of the Cristianitos Fault:

11 "The Cristianitos Fault is an expression of crustal
12 extension with the block on the west moving down relative to the
13 block on the east. The fault trends approximately north 20
14 degrees west for about 32 kilometers (20 miles) inland from its
15 coastal exposure. Within the site area, the fault juxtaposes
16 Eocene and middle Miocene rocks, the Santiago and San Onofre
17 Breccia, respectively, against upper Miocene Capistrano and San
18 Mateo Formations (of probable Pliocene age). Investigations have
19 demonstrated the age of the fault to be greater than 120,000
20 years old, based on the overlying terrace material which has not
21 been offset wherever the contact with the underlying formation is
22 exposed. In addition, there is no evidence of any fault movement
23 in the past 500,000 years."

24 INTERROGATORY NO. 4:

25 If you disagree with the description of the
26 Cristianitos Fault set forth in Interrogatory No. 4 as accurate,
27 state that which you contend is inaccurate and the basis for your
28 contention.

1 INTERROGATORY NO. 5:

2 Do you contend that the Cristianitos Fault extends
3 southward for a distance greater than 6000 feet offshore from its
4 coastal expression? If so,

5 (a) State each and every fact upon which you base this
6 contention;

7 (b) Identify each and every document or communication
8 upon which you base this contention;

9 (c) Identify each and every person with knowledge of
10 the factual basis or bases for this contention, or on whose
11 writings, opinions, or testimony you base this contention; and

12 (d) Identify each and every person, expert or
13 otherwise, whom you expect to call as a witness at the hearing
14 before the Atomic Safety and Licensing Board in support of this
15 contention, and as to each potential witness so identified
16 provide the following information:

17 (i) State the substance of the facts and opinions
18 to which you expect the witness to testify;

19 (ii) Summarize the factual and theoretical basis,
20 as well as any other grounds, for each opinion to which the
21 witness is expected to testify.

22 INTERROGATORY NO. 6:

23 What do you contend is the minimum age of last
24 displacement on the Cristianitos Fault?

25 (a) State each and every fact upon which you base this
26 contention;

27 (b) Identify each and every document or communication
28 upon which you base this contention;

1 (c) Identify each and every person with knowledge of
2 the factual basis or bases for this contention, or on whose
3 writings, opinions, or testimony you base this contention; and

4 (d) Identify each and every person, expert or
5 otherwise, whom you expect to call as a witness at the hearing
6 before the Atomic Safety and Licensing Board in support of this
7 contention, and as to each potential witness so identified
8 provide the following information:

9 (i) State the substance of the facts and opinions
10 to which you expect the witness to testify;

11 (ii) Summarize the factual and theoretical basis,
12 as well as any other grounds, for each opinion to which the
13 witness is expected to testify.

14 INTERROGATORY NO. 7:

15 Do you contend that the Cristianitos Fault is a
16 "capable fault" If so,

17 (a) State each and every fact upon which you base this
18 contention;

19 (b) Identify each and every document or communication
20 upon which you base this contention;

21 (c) Identify each and every person with knowledge of
22 the factual basis or bases for this contention, or on whose
23 writings, opinions, or testimony you base this contention; and

24 (d) Identify each and every person, expert or
25 otherwise, whom you expect to call as a witness at the hearing
26 before the Atomic Safety and Licensing Board in support of this
27 contention, and as to each potential witness so identified
28 provide the following information:

1 (i) State the substance of the facts and opinions
2 to which you expect the witness to testify;

3 (ii) Summarize the factual and theoretical basis,
4 as well as any other grounds, for each opinion to which the
5 witness is expected to testify; and

6 (e) Identify each and every event upon which you base
7 this contention.

8 INTERROGATORY NO. 8:

9 Do you agree with the United States Geological Survey's
10 (U.S.G.S.) definition of the OZD as an extensive, linear zone of
11 deformation at least 240 kilometers (km) long extending from the
12 Santa Monica Mountains to at least Baja, California, and located
13 about five miles offshore from the SONGS 2 and 3 site?

14 INTERROGATORY NO. 9:

15 If you do not agree with the U.S.G.S.'s definition of
16 the OZD as set forth in Interrogatory No. 9, state that which you
17 contend is inaccurate and the basis for your contention.

18 INTERROGATORY NO. 10:

19 Do you contend that a "seismic gap", as that term is
20 defined by you, in Interrogatory No. 2(g), exists offshore the
21 SONGS 2 and 3 site? If so,

22 (a) State each and every fact upon which you base this
23 contention;

24 (b) Identify each and every document or communication
25 upon which you base this contention;

26 (c) Identify each and every person with knowledge of
27 the factual basis or bases for this contention, or on whose
28

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1 writings, opinions, or testimony you base this contention; and

2 (d) Identify each and every person, expert or
3 otherwise, whom you expect to call as a witness at the hearing
4 before the Atomic Safety and Licensing Board in support of this
5 contention, and as to each potential witness so identified
6 provide the following information:

7 (i) State the substance of the facts and opinions
8 to which you expect the witness to testify;

9 (ii) Summarize the factual and theoretical basis,
10 as well as any other grounds, for each opinion to which the
11 witness is expected to testify.

12 INTERROGATORY NO. 11:

13 Do you admit that the OZD is the controlling geologic
14 structure for seismic design of SONGS 2 and 3?

15 INTERROGATORY NO. 12:

16 If you do not admit that the OZD is the controlling
17 geologic structure for seismic design of SONGS 2 and 3 what do
18 you contend is the controlling geologic structure?

19 (a) State each and every fact upon which you base this
20 contention;

21 (b) Identify each and every document or communication
22 upon which you base this contention;

23 (c) Identify each and every person with knowledge of
24 the factual basis or bases for this contention, or on whose
25 writings, opinions, or testimony you base this contention; and

26 (d) Identify each and every person, expert or
27 otherwise, whom you expect to call as a witness at the hearing
28 before the Atomic Safety and Licensing Board in support of this

1 contention, and as to each potential witness so identified
2 provide the following information:

3 (i) State the substance of the facts and opinions
4 to which you expect the witness to testify;

5 (ii) Summarize the factual and theoretical basis,
6 as well as any other grounds, for each opinion to which the
7 witness is expected to testify.

8 INTERROGATORY NO. 13:

9 What do you contend is the maximum magnitude earthquake
10 that could occur on the OZD?

11 (a) State each and every fact upon which you base this
12 contention;

13 (b) Identify each and every document or communication
14 upon which you base this contention;

15 (c) Identify each and every person with knowledge of
16 the factual basis or bases for this contention, or on whose
17 writings, opinions, or testimony you base this contention; and

18 (d) Identify each and every person, expert or
19 otherwise, whom you expect to call as a witness at the hearing
20 before the Atomic Safety and Licensing Board in support of this
21 contention, and as to each potential witness so identified
22 provide the following information:

23 (i) State the substance of the facts and opinions
24 to which you expect the witness to testify;

25 (ii) Summarize the factual and theoretical basis,
26 as well as any other grounds, for each opinion to which the
27 witness is expected to testify.

28 ///

1 INTERROGATORY NO. 14:

2 What do you contend is the maximum magnitude earthquake
3 that could occur on the controlling geologic structure you have
4 described in Interrogatory No. 12?

5 (a) State each and every fact upon which you base this
6 contention;

7 (b) Identify each and every document or communication
8 upon which you base this contention;

9 (c) Identify each and every person with knowledge of
10 the factual basis or bases for this contention, or on whose
11 writings, opinions, or testimony you base this contention; and

12 (d) Identify each and every person, expert or
13 otherwise, whom you expect to call as a witness at the hearing
14 before the Atomic Safety and Licensing Board in support of this
15 contention, and as to each potential witness so identified
16 provide the following information:

17 (i) State the substance of the facts and opinions
18 to which you expect the witness to testify;

19 (ii) Summarize the factual and theoretical basis,
20 as well as any other grounds, for each opinion to which the
21 witness is expected to testify.

22 INTERROGATORY NO. 15:

23 What do you contend is the minimum age of last
24 displacement on the South Coast Offshore Zone of Deformation
25 portion of the OZD?

26 (a) State each and every fact upon which you base this
27 contention;

28 (b) Identify each and every document or communication

1 upon which you base this contention;

2 (c) Identify each and every person with knowledge of
3 the factual basis or bases for this contention, or on whose
4 writings, opinions, or testimony you base this contention; and

5 (d) Identify each and every person, expert or
6 otherwise, whom you expect to call as a witness at the hearing
7 before the Atomic Safety and Licensing Board in support of this
8 contention, and as to each potential witness so identified
9 provide the following information:

10 (i) State the substance of the facts and opinions
11 to which you expect the witness to testify;

12 (ii) Summarize the factual and theoretical basis,
13 as well as any other grounds, for each opinion to which the
14 witness is expected to testify; and

15 (e) Identify each and every event upon which you base
16 this contention.

17 INTERROGATORY NO. 16:

18 What do you contend is the minimum age of last
19 displacement on the Newport-Inglewood Zone of Deformation portion
20 of the OZD?

21 (a) State each and every fact upon which you base this
22 contention;

23 (b) Identify each and every document or communication
24 upon which you base this contention;

25 (c) Identify each and every person with knowledge of
26 the factual basis or bases for this contention, or on whose
27 writings, opinions, or testimony you base this contention; and

28 (d) Identify each and every person, expert or

1 otherwise, whom you expect to call as a witness at the hearing
2 before the Atomic Safety and Licensing Board in support of this
3 contention, and as to each potential witness so identified
4 provide the following information:

5 (i) State the substance of the facts and opinions
6 to which you expect the witness to testify;

7 (ii) Summarize the factual and theoretical basis,
8 as well as any other grounds, for each opinion to which the
9 witness is expected to testify; and

10 (e) Identify each and every event upon which you base
11 this contention.

12 INTERROGATORY NO. 17:

13 What do you contend is the minimum age of last
14 displacement on the Rose Canyon Fault Zone portion of the OZD?

15 (a) State each and every fact upon which you base this
16 contention;

17 (b) Identify each and every document or communication
18 upon which you base this contention;

19 (c) Identify each and every person with knowledge of
20 the factual basis or bases for this contention, or on whose
21 writings, opinions, or testimony you base this contention; and

22 (d) Identify each and every person, expert or
23 otherwise, whom you expect to call as a witness at the hearing
24 before the Atomic Safety and Licensing Board in support of this
25 contention, and as to each potential witness so identified
26 provide the following information:

27 (i) State the substance of the facts and opinions
28 to which you expect the witness to testify;

1 (ii) Summarize the factual and theoretical basis,
2 as well as any other grounds, for each opinion to which the
3 witness is expected to testify; and

4 (e) Identify each and every event upon which you base
5 this contention.

6 INTERROGATORY NO. 18.

7 Do you contend that there exists geomorphic expressions
8 or other geologic evidence on the OZD that could have resulted
9 from ground motion related to an earthquake on the OZD of
10 magnitude:

11 (a) M 6.5?

12 (b) M 7.0?

13 (c) M 7.5?

14 (d) M 8.0?

15 INTERROGATORY NO. 19:

16 If any of your answers to Interrogatories 20(a), 20(b),
17 20(c) or 20(d) is yes, for each yes answer,

18 (a) State each and every fact upon which you base this
19 contention;

20 (b) Identify each and every document or communication
21 upon which you base this contention;

22 (c) Identify each and every person with knowledge of
23 the factual basis or bases for this contention, or on whose
24 writings, opinions, or testimony you base this contention; and

25 (d) Identify each and every person, expert or
26 otherwise, whom you expect to call as a witness at the hearing
27 before the Atomic Safety and Licensing Board in support of this
28 contention, and as to each potential witness so identified

1 provide the following information:

2 (i) State the substance of the facts and opinions
3 to which you expect the witness to testify;

4 (ii) Summarize the factual and theoretical basis,
5 as well as any other grounds, for each opinion to which the
6 witness is expected to testify; and

7 (e) Identify each and every event upon which you base
8 this contention.

9 INTERROGATORY NO. 20:

10 Is it your contention that there is a postulated zone
11 of deformation which extends from the coastal exposure of the
12 Cristianitos Fault toward the OZD but which dies out before
13 reaching the OZD?

14 INTERROGATORY NO. 21:

15 If you do not subscribe to the contention set forth in
16 Interrogatory No. 20,

17 (a) State each and every fact upon which you base your
18 disagreement with the contention;

19 (b) Identify each and every document or communication
20 upon which you base your disagreement with the contention;

21 (c) Identify each and every person with knowledge of
22 the factual basis or bases for your disagreement with the
23 contention, or on whose writings, opinions, or testimony you base
24 your disagreement with the contention; and

25 (d) Identify each and every person, expert or
26 otherwise, whom you expect to call as a witness at the hearing
27 before the Atomic Safety and Licensing Board in support of your
28 disagreement with the contention, and as to each potential

1 witness so identified provide the following information:

2 (i) State the substance of the facts and opinions
3 to which you expect the witness to testify;

4 (ii) Summarize the factual and theoretical basis,
5 as well as any other grounds, for each opinion to which the
6 witness is expected to testify.

7 INTERROGATORY NO. 22:

8 Do you contend that there is a structural relationship
9 between the Cristianitos Fault and the OZD? If so,

10 (a) State each and every fact upon which you base this
11 contention;

12 (b) Identify each and every document or communication
13 upon which you base this contention;

14 (c) Identify each and every person with knowledge of
15 the factual basis or bases for this contention, or on whose
16 writings, opinions, or testimony you base this contention; and

17 (d) Identify each and every person, expert or
18 otherwise, whom you expect to call as a witness at the hearing
19 before the Atomic Safety and Licensing Board in support of this
20 contention, and as to each potential witness so identified
21 provide the following information:

22 (i) State the substance of the facts and opinions
23 to which you expect the witness to testify;

24 (ii) Summarize the factual and theoretical basis,
25 as well as any other grounds, for each opinion to which the
26 witness is expected to testify.

27 (e) Identify each and every event upon which you base
28 this contention.

1 INTERROGATORY NO. 23:

2 At what location(s) along the OZD, do you contend there
3 exists a structural relationship between the OZD and the
4 Cristianitos?

5 INTERROGATORY NO. 24:

6 Do you contend that the OZD extends south of the Rose
7 Canyon Fault Zone? If so,

8 (a) State each and every fact upon which you base this
9 contention;

10 (b) Identify each and every document or communication
11 upon which you base this contention;

12 (c) Identify each and every person with knowledge of
13 the factual basis or bases for this contention, or on whose
14 writings, opinions, or testimony you base this contention; and

15 (d) Identify each and every person, expert or
16 otherwise, whom you expect to call as a witness at the hearing
17 before the Atomic Safety and Licensing Board in support of this
18 contention, and as to each potential witness so identified
19 provide the following information:

20 (i) State the substance of the facts and opinions
21 to which you expect the witness to testify;

22 (ii) Summarize the factual and theoretical basis,
23 as well as any other grounds, for each opinion to which the
24 witness is expected to testify.

25 INTERROGATORY NO. 25:

26 Do you contend that there is a structural relationship
27 between the Rose Canyon Fault Zone and the Vallecitos Fault in
28 Baja, California? If so,

1 (a) State each and every fact upon which you base this
2 contention;

3 (b) Identify each and every document or communication
4 upon which you base this contention;

5 (c) Identify each and every person with knowledge of
6 the factual basis or bases for this contention, or on whose
7 writings, opinions, or testimony you base this contention; and

8 (d) Identify each and every person, expert or
9 otherwise, whom you expect to call as a witness at the hearing
10 before the Atomic Safety and Licensing Board in support of this
11 contention, and as to each potential witness so identified
12 provide the following information:

13 (i) State the substance of the facts and opinions
14 to which you expect the witness to testify;

15 (ii) Summarize the factual and theoretical basis,
16 as well as any other grounds, for each opinion to which the
17 witness is expected to testify.

18 INTERROGATORY NO. 26:

19 Do you contend that there is a structural relationship
20 between the Rose Canyon Fault Zone and the San Miguel Fault in
21 Baja, California? If so,

22 (a) State each and every fact upon which you base this
23 contention;

24 (b) Identify each and every document or communication
25 upon which you base this contention;

26 (c) Identify each and every person with knowledge of
27 the factual basis or bases for this contention, or on whose
28 writings, opinions, or testimony you base this contention; and

1 (d) Identify each and every person, expert or
2 otherwise, whom you expect to call as a witness at the hearing
3 before the Atomic Safety and Licensing Board in support of this
4 contention, and as to each potential witness so identified
5 provide the following information:

6 (i) State the substance of the facts and opinions
7 to which you expect the witness to testify;

8 (ii) Summarize the factual and theoretical basis,
9 as well as any other grounds, for each opinion to which the
10 witness is expected to testify.

11 INTERROGATORY NO. 27:

12 Do you contend that there is a relationship between the
13 OZD and the San Andreas such that an earthquake on the San
14 Andreas would generate an earthquake of M 6.5 or larger on the
15 OZD and cause ground motion in excess of .67g at the SONGS 2 and
16 3 site? If so,

17 (a) State each and every fact upon which you base this
18 contention;

19 (b) Identify each and every document or communication
20 upon which you base this contention;

21 (c) Identify each and every person with knowledge of
22 the factual basis or bases for this contention, or on whose
23 writings, opinions, or testimony you base this contention; and

24 (d) Identify each and every person, expert or
25 otherwise, whom you expect to call as a witness at the hearing
26 before the Atomic Safety and Licensing Board in support of this
27 contention, and as to each potential witness so identified
28 provide the following information:

1 (i) State the substance of the facts and opinions
2 to which you expect the witness to testify;

3 (ii) Summarize the factual and theoretical basis,
4 as well as any other grounds, for each opinion to which the
5 witness is expected to testify; and

6 (e) Identify each and every event upon which you base
7 this contention.

8 INTERROGATORY NO. 28:

9 Do you admit that .67 g is the proper design
10 acceleration value for for SONGS 2 and 3?

11 INTERROGATORY NO. 29:

12 If your answer to Interrogatory No. 29 is no, what do
13 you contend is the proper design acceleration value for SONGS 2
14 and 3?

15 (a) State each and every fact upon which you base this
16 contention;

17 (b) Identify each and every document or communication
18 upon which you base this contention;

19 (c) Identify each and every person with knowledge of
20 the factual basis or bases for this contention, or on whose
21 writings, opinions, or testimony you base this contention; and

22 (d) Identify each and every person, expert or
23 otherwise, whom you expect to call as a witness at the hearing
24 before the Atomic Safety and Licensing Board in support of this
25 contention, and as to each potential witness so identified
26 provide the following information:

27 (i) State the substance of the facts and opinions
28

///
28

1 to which you expect the witness to testify;

2 (ii) Summarize the factual and theoretical basis,
3 as well as any other grounds, for each opinion to which the
4 witness is expected to testify.

5 INTERROGATORY NO. 30:

6 Do you disagree that the likelihood of ground
7 displacement within the SONGS 2 and 3 site is negligible?

8 INTERROGATORY NO. 31:

9 Do you contend that there is a likelihood of ground
10 displacement within the plant site? If so,

11 (a) State each and every fact upon which you base this
12 contention;

13 (b) Identify each and every document or communication
14 upon which you base this contention;

15 (c) Identify each and every person with knowledge of
16 the factual basis or bases for this contention, or on whose
17 writings, opinions, or testimony you base this contention; and

18 (d) Identify each and every person, expert or
19 otherwise, whom you expect to call as a witness at the hearing
20 before the Atomic Safety and Licensing Board in support of this
21 contention, and as to each potential witness so identified
22 provide the following information:

23 (i) State the substance of the facts and opinions
24 to which you expect the witness to testify;

25 (ii) Summarize the factual and theoretical basis,
26 as well as any other grounds, for each opinion to which the
27 witness is expected to testify; and

28 (e) Identify each and every event upon which you base

1 this contention.

2 INTERROGATORY NO. 32:

3 Have you contracted with or contacted any consultants
4 to analyze any aspect of the Imperial Valley earthquake of
5 October 15, 1979? If so,

6 (a) Identify each and every consultant who has
7 conducted such analysis on your behalf;

8 (b) Identify each and every document, writing, or
9 communication arising out of the analysis performed by your
10 consultants on the Imperial Valley earthquake which you expect to
11 use at the hearing on the seismic contention before the Atomic
12 Safety and Licensing Board;

13 (c) Summarize the substance of the findings and/or
14 conclusions of your consultants which they have derived from
15 their analysis of the Imperial Valley earthquake,

16 (1) with respect to SONGS 2 and 3

17 (2) with respect to any other nuclear power plant
18 site in California; and

19 (d) Summarize the factual and theoretical bases, as
20 well as any other grounds, upon which your consultants base their
21 findings and/or conclusions on the Imperial Valley earthquake,

22 (1) with respect to SONGS 2 and 3

23 (2) with respect to any other nuclear power plant
24 site in California.

25 INTERROGATORY NO. 33:

26 At the present time do you contend that the seismic
27 design basis for SONGS Units 2 and 3 is inadequate to protect the
28 public health and safety and does not comply with 10 C.F.R., Part

1 100, Appendix A, in that the earthquake which could cause the
2 maximum vibratory ground motion has not been assigned as the safe
3 shutdown earthquake? If so,

4 (a) State each and every fact arising after July 28,
5 1978 upon which you base this contention;

6 (b) Identify each and every document or communication
7 that has come to your attention, subsequent to July 28, 1978 upon
8 which you base this contention;

9 (c) Identify each and every seismic event or geologic
10 evidence subsequent to July 28, 1978 upon which you base this
11 contention;

12 (d) Identify each and every person with knowledge of
13 the factual basis or bases for this contention or on whose
14 writings, opinions, or testimony you base this contention that
15 you did not identify in your response to Interrogatory No. 1,
16 Intervenor, FOE et al. answers to Interrogatories propounded by
17 Southern California Edison, July 28, 1978.

18 (e) Identify each and every person whom you expect to
19 call as a witness, expert or otherwise, at the hearing on this
20 contention before the Atomic Safety and Licensing Board, and as
21 to each potential witness so identified, provide the following
22 information:

23 (i) State the precise subject matter on which
24 the witness is expected to testify

25 (ii) State the substance of the facts and
26 opinions to which you expect the witness to testify, and,

27 (iii) Summarize the factual and theoretical bases
28

1 as well as any other grounds, for each opinion to which the
2 witness is expected to testify.

3 INTERROGATORY NO. 34:

4 State the name and position or title of each individual
5 who participated in responding, in whole or in part, to these
6 interrogatories, and

7 (a) Specify the interrogatory answered or responded to
8 by such individual;

9 (b) If any individual participated in answering or
10 responding to part of an interrogatory, specify each such part as
11 to each individual.

12 DATED: November 24, 1980

13
14 DAVID R. PIGOTT
15 SAMUEL B. CASEY
16 CHICKERING and GREGORY

17 CHARLES R. KOCHER
18 JAMES A. BEOLETTO
19 SOUTHERN CALIFORNIA EDISON COMPANY

20 By



21 David R. Pigott
22 One of Counsel for Applicants
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PROOF OF SERVICE BY MAIL

I declare that:

I am employed in the City and County of San Francisco, California.

I am over the age of eighteen years and not a party to the within entitled action; my business address is Three Embarcadero Center, Suite 2300, San Francisco, California 94111.

On November 24, 1980, I served the attached "SECOND SET OF INTERROGATORIES TO INTERVENORS FRIENDS OF THE EARTH, MR. AND MRS. AUGUST CARSTENS, MR. AND MRS. LLOYD VON HADEN, MR. DONALD MAY AND MRS. DONIS DAVEY" on the following in said cause, by placing a true copy thereof enclosed in sealed envelopes with postage thereon fully prepaid, in the United States mail at San Francisco addressed as follows:

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