03/16/81

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
GENERAL ELECTRIC COMPANY	)	Docket No. 50-70
	)	(Show Cause)
(Vallecitos Nuclear Center -	)	
General Electric Test Reactor,	)	
Operating License No. TR-1)	)	

NRC STAFF REQUEST FOR ADMISSIONS
AND INTERROGATORIES TO LICENSEE

I. REQUEST FOR ADMISSIONS

Pursuant to 10 CFR § 2.742, the NRC Staff requests the Licensee, by April 3, 1981, to make the following admissions of the truth of the specified relevant matters of fact for the purposes of this proceeding only. The specifications of facts are taken from statements in the Staff's SER dated May 23, 1980, Section A.

1. Geologic data indicate that the GETR site is located within a zone of faulting (the Verona fault) which is at least 2200 feet wide.

2. Since the Verona fault displaces Holocene (less than 10,000 years old) soils it is a capable fault within the meaning of Appendix A to 10 CFR Part 100 and, therefore, poses a potential for surface faulting near or beneath the reactor site.

3. Future displacements in the GETR site area have a higher likelihood of occurring along existing fault breaks than between them.

4. The possible existence of faulting has been identified in photographs of the GETR excavation.

5. One meter of reverse-oblique net slip along a fault plane which could vary in dip from about 10 to 45 degrees provides an appropriate description of surface displacement which could occur on a Verona fault strand (splay) beneath the reactor during a single event.

6. Maximum vibratory ground motion at the GETR site would result from a magnitude 7 to 7.5 earthquake centered on the section of the Calaveras fault nearest the site. Acceleration peaks at the free-field surface, (i.e., not incorporating factors dependent on soil-structure interaction or the behavior of the structure) could be slightly in excess of 1 g.

7. The horizontal vibratory ground motion at the GETR site resulting from an earthquake of magnitude 6 to 6.5 centered on the Verona fault could contain acceleration peaks as high as 1 g. However, the overall level and duration of shaking would be less than for a magnitude 7 to 7.5 earthquake centered on the Calaveras fault approximately 2 kilometers from the site.

8. Combined loads caused by fault offset at the surface and vibratory ground motion must be considered to act simultaneously because there is no reasonable way to conservatively forecast the location of rupture initiation, the mode of rupture propagation and the potential source area for radiated seismic energy or the sequence of possible interaction among the Calaveras, the Verona and the Las Positas faults.

9. Although the evidence strongly supports tectonic origin of the offsets observed in the trench exposures at the site, there is also evidence for a potential landslide hazard at the site. This is based on (1) location of the GETR within a shear zone; (2) evidence for repetitive displacements on these shears; (3) youngest offset during the Holocene; (4) topographic

relief adjacent to the site; and (5) potential for seismic loading.

II. INTERROGATORIES

Pursuant to 10 CFR § 2.740b, the Staff serves the following interrogatories to the Licensee to be answered separately and fully in writing under oath or affirmation. In accordance with the provisions of 10 CFR § 2.740b(b), the answers are to be signed by the person making them.

Pursuant to the Memorandum and Order issued by the presiding Atomic Safety and Licensing Board dated February 3, 1981, answers to these interrogatories are to be filed by April 3, 1981.

Instructions and Definitions

1. Information sought in these interrogatories shall include information within the knowl dge, possession, control or access of any agents, employees and independent contractors of the Licensee, as well as the Licensee itself.

2. As used herein, "documents" includes, but is not limited to, construction plans and specifications, papers, photographs, criteria, standards of review, recordings, memoranda, books, records, writings, letters, telegrams, mailgrams, correspondence, notes and minutes of meetings or of conversations or of phone calls, interoffice, interagency memorandum or written communications of any nature, recordings of conversations either in writing or upon any mechanical or electronic or electrical recording devices, notes, exhibits, appraisals, work papers, reports, studies, opinions, surveys, evaluations, projections, hypotheses, formulas, designs, drawings, manua' notebooks, worksheets, contracts, agreements, letter agreements, diaries,

desk calendars, charts, schedules, appointment books, punchcards and computer printout sheets, computer data, telecopies transmissions, directives, proposals, and all drafts, revisions, and differing versions (whether formal or informal) of any of the foregoing, and also all copies of any of the foregoing which differ in any way (including handwritten notations or other written or printed matter of any nature) from the original.

3. The first three interrogatories are based on the "Licensee's Supplemental Responses to Friends of the Earth's Interrogatories Dated April 20, 1978", dated February 25, 1981, pages 5-8 (Responses).

Interrogatories

1.a.) Have you admitted each statement included in Section I. of this document entitled "Request for Admissions?"

b.) If the answer to Interrogatory 1(a) is no, identify each statement in Section I. which you do not admit.

2. For each statement identified in Interrogatory 1(b) give the following information:

a.) The portion of statement which is not admitted.

b.) The basis of your disagreement with the statement.

c.) The expert witnesses, if any you are relying on in disagreeing with the statement.

d.) The document, if any, you are relying on in disagreeing with the statement.

e.) The articles, if any, you are relying on in disagreeing with the statement.

3. For each expert identified in Interrogatory 2(c) above provide the following information:

a.) Name and address.

b.) Statements in Section I. which the expert disagrees with.

c.) The basis for the disagreement identified in part b of this interrogatory (include any facts or theories relied on).

d.) Any articles or studies relied on by the expert in disagreeing with the statements identified in part b of this interrogatory.

e.) If expert will be or is expected to be a witness in the captioned proceeding, identify the subjects on which he will testify.

f.) The education background of the expert after high school (include all courses taken in area of expertise even if not leading to a degree).

g.) The work experience of the expert for the last 15 years.

h.) Any published articles written by expert.

4. In answer to Q.1-5 you propose to give testimony to include "a comparative analysis of the postulated Verona fault system to other fault systems, including the San Fernardo fault system, to demonstrate the conservatism of the NRC Staff's 1.0 meter design basis ..." Further, you state that the bases for the testimony are to be found in a list of references as specified on page 6 of your "Responses".

Please specify the page numbers in the references listed on page 6 of your "Responses" concerning comparative analyses of the Verona fault as well as additional references that you intend to be utilized on this point in your proposed testimony.

5. In answer to Q.1-6, you propose to give testimony to include an evaluation of the available near field strong-motion data such as from the Imperial Valley (1979), Tabas, Iran (1978), and Gazli, Russia (1976) earthquakes to establish the conservatism of the NRC Staff's vibratory ground motion criteria.

Specify the data set, bases, calculations and references which you intend to use in such testimony in support of this point.

6. In answer to Interrogatory 1-6 you propose to give testimony to include "an evaluation of earthquake magnitude-seismic moment considerations to assess the conservatism of the NRC's criteria for events on the Calaveras and Verona faults." You mention several references on moment-magnitude scale.

Specify the data set, bases, calculations, and conclusions for the Calaveras and Verona faults that you intend to use to establish magnitude-moment relationships. Explain the uncertainties in the results of the above conclusions that you have determined.

7. Is it your position in this proceeding that operation of the GETR should continue to be suspended pending resolution of the first two issues specified by the Commission in its February 13, 1978 Order?

8. Do you intend to introduce evidence on any issue in this proceeding which contain any modifications to the bases, assumptions, or conclusions

which are contained in your latest submittals to the Staff in this proceeding?

Respectfully submitted,

Daniel T. Swanson
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 16th day of March, 1981