



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FEB 3 1978

A. Schwencer
Nelson/Reid

MEMORANDUM FOR: Karl Goller, Assistant Director for
Operating Reactors, DOR

FROM: William P. Gammill, Assistant Director
for Site Technology, DSE

SUBJECT: ACTION PLAN — GE's RESPONSE TO NRC ORDER ON GETR

Reference is made to the memorandum from A. Schwencer to Victor Stello, Jr., dated January 23, 1978, subject as above. The proposed plan calls for completion of our review by late February in preparation for a pre-hearing conference which might take place as early as February 28, 1978.

The action plan noted that we do not intend to get USGS concurrence on the SER because of the short time involved. I would note that it is not our practice to obtain USGS concurrence on our SER's. However, inasmuch as we have requested the USGS views on the potential for surface faulting at the Vallecitos site, I feel that it would be unwise for the staff to take a firm position on this issue before we have a complete understanding of the USGS views. This is especially true in light of the status of review which we received from the USGS on February 1, 1978, a copy of which is enclosed.

In order to expedite our review, we are attempting to schedule a meeting with the principal USGS reviewers. However, I am not at all optimistic about our ability to complete our review and establish a firm position in time for the SER to be published in February. I will keep you informed with respect to our efforts to complete the review.

W. P. Gammill

William P. Gammill, Assistant Director
for Site Technology
Division of Site Safety and
Environmental Analysis

Enclosure:
As stated

cc: See attached page

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Karl Goller

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cc w/encl:

E. Case

V. Stello

H. Denton

D. Muller

~~A. Schwencer~~

F. Burger

C. Stepp

R. Hofmann

R. Jackson

J. Kelleher



United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

January 30, 1978



Mr. William P. Gammill
Assistant Director for Site Technology
Division of Safety and Environmental Analysis
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Gammill:

Enclosed please find a status review by R. H. Morris concerning
the GETR site, Vallecitos, California, dated January 20, 1978.

This review was read to Mr. Hofmann of your office over the
telephone on January 25, 1978, in order to provide USGS input
for the meeting being held at that time. This is, therefore, a
confirmation copy of that telephone conversation.

Sincerely,

Penelope M. Hanshaw
Staff Geologist for Special Programs
Office of Environmental Geology

DUR

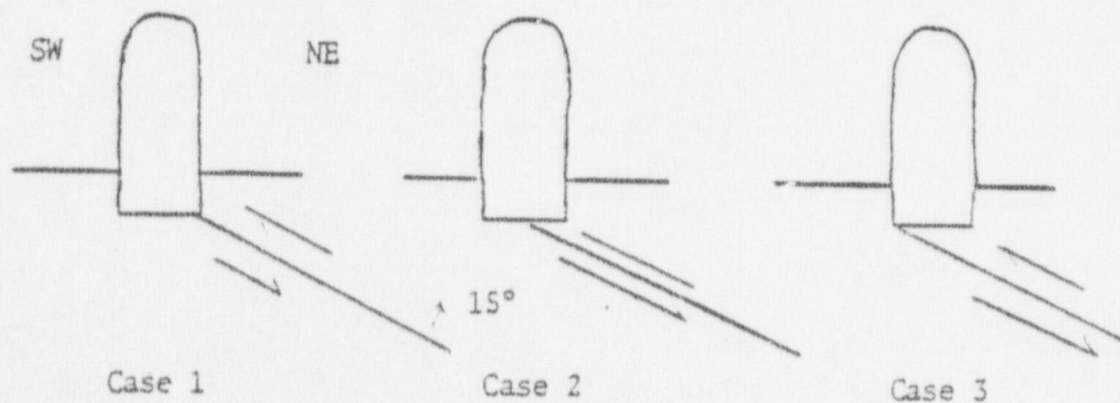
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Status Review
Vallecitos, Calif.
Robert H. Morris
January 20, 1978

General Electric Company
General Electric Test Reactor
Vallecitos, California
NRC Docket No. 50-70

Geology

The U.S. Geological Survey has been requested by the Nuclear Regulatory Commission to evaluate the proposal submitted by the General Electric Company which postulates movement of 1 m along a hypothetical northeast-dipping (15°) thrust fault at the GETR (General Electric Test Reactor) site. Three possible conditions are considered: (1) the fault impinges on the northeast side of the base of the reactor vessel, (2) the fault impinges on the central portion of the base of the vessel, and (3) the fault impinges on the southwest base of the vessel.



In evaluating this proposal the most similar recent earthquake with sufficient detailed data available and upon which comparative assessment can be made is the San Fernando earthquake of February 9, 1971 (Murphy, 1973). This earthquake was of 6.4 magnitude and produced 2.4 m (7.9 ft) of net slip along a thrust fault dipping 35° to the east. Higher-than-expected accelerations from that earthquake were observed at several points. Also, the duration and area of strong ground motion were extensive for this earthquake.

General Electric Company postulates 1 m (3.3 ft) along a fault at Vallecitos. In the trench excavation of the Verona fault, reverse dip slip of about 5 m (15 ft) was observed. Insufficient geologic data were available to determine if this amount of slip occurred as one episode or as multiple episodes of faulting or if the 5 m is net or apparent dip slip. Considering the lack of definitive proof of movement on the Verona fault and the fact that the San Fernando earthquake produced 2.4 m (7.9 ft) of net slip the 1 m of movement postulated by General Electric Company does not seem to provide adequate conservatism.

Reference

Murphy, L. M., sci. coordinator, 1973, San Fernando, California, earthquake of February 9, 1971: U.S. Dept. Commerce, 432 p.