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March 20, 1978



L. Dow Davis, Esq. Counsel for NRC Staff Office of Executive Legal Director U. S. Nuclear Regulatory Commission Washington, D. C. 20555

RELATED COPRESPONDENCE

Re: In the Matter of Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units Nos. 1 and 2) Docket Nos. 50-275 O.L. and 50-323 O.L.

Dear Dow:

ID S. FLEISCHAKI

ATTORNEY AT LAW

This is in response to your letter of February 13, 1978 setting forth for approval both a draft hearing schedule and draft contentions. My comments on both are set forth below.

A. Draft Hearing Schedule

Essentially the parties tentatively agreed to a schedule of time intervals. Your hypothetical schedule correctly reflects those intervals.

1. The hearing schedule is keyed to issuance of the transcript from the ACRS full committee meeting.

2. Final set of interrogatories are to be propounded within 17 days of issuance of ACRS transcripts.

3. Discovery period ends 21 days after the final day for propounding interrogatories.

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4. Prepared testimony in hand 28 days from date of close of discovery.

5. Hearing commences 15 days from date of submission of testimony.

One caveat is necessary. We understand that the staff will issue an SER supplement subsequent to the ACRS meeting. That supplement may raise matters that require additional discovery or matters that require additional time for preparation of testimony. If so, we will request that such time be provided.

B. . Draft Contentions

Set out below are the changes we propose in the draft contentions. Your text has been used as the reference. All additions are underlined and deletions are placed in parenthesis.

"The seismic design for the Category 1 structures, systems and components of the Diablo Canyon Nuclear Power Plant (Unit 1) fails to provide the margin of safety required by 10 C.F.R. §50 and 10 C.F.R. §100 in that:

a. The applicant has failed to conduct investigations of the Hosgri fault system to determine adequately (i) the length of the fault; (ii) the relationship of the fault to regional tectonic structures; and (iii) the nature, amount, and geologic history of displacements along the fault, including particularly the estimated amount of the maximum Quaternary displacement related to any one earthquake along the fault.

b. A 7.5 Magnitude [safe shutdown] earthquake is not an appropriate [estimate of the earthquake potential of the Hosgri fault] value for the safe shutdown earthquake.

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> c. A .75g acceleration assigned to the safe shutdown earthquake is not an appropriate value for the maximum <u>vibratory</u> acceleration that could occur at the site;

> d. The maximum vibratory [ground] acceleration of .2g for the operating basis earthquake is not one-half the maximum vibratory [ground] acceleration of the safe shutdown earthquake;

e. The applicant has failed to demonstrate, through the use of either appropriate dynamic analyses or qualification test (or equivalent static load method where appropriate), that Category I structures, systems, and components will perform as required during the seismic load of the safe shutdown earthquake, [or] <u>including</u> aftershocks and applicable concurrent functional and accident-induced loads, [or] <u>and that</u> [Class 1] Category 1 structures, systems and components [in order] will be adequate to assure:

(1) the integrity of the reactor coolant pressure boundary,

(2) the capability to shut down the reactor and maintain it in a safe condition, or

(3) the capability to prevent or mitigate the consequences of accidents which could result in excessive offsite exposure.

f. The applicant has failed to demonstrate, through the use of either appropriate dynamic analyses or qualification test (or equivalent static load methods where appropriate), that all structures, systems and components of the nuclear power plant necessary for continued operation without undue risk to the health and safety of the public will remain functional and within applicable stress and deformation limits when subjected to the effects of the vibratory motion of the operating basis earthquake in combination with normal operating loads.

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L. Dow Davis, Esq. Page Four

> g. The applicant has failed to demonstrate adequately that necessary safety functions are maintained during the safe shutdown earthquake where, in safety-related structures, systems and components, the design for strain limits is in excess of the yield strain.

The reason for the changes are as follows:

A new paragraph a. adds language that explicitly states the intervenors' concern that the applicant has not adequately investigated the Hosgri fault system and relationship between that fault, the San Gregorio fault and the San Andreas fault. This subject was implicit in the draft contention. The new language makes it explicit.

Paragraph b. (formerly a.) incorporates changes required to clarify the intervenors' position that assessment of the SSE cannot be limited to the Hosgri fault alone, but must include an assessment of the seismic risk of the San Gregorio-Hosgri fault systems.

Paragaph c. (formerly b.) adds the word "vibratory" to reflect more accurately the language of Appendix A.

Paragaph d. (formerly c.) deletes the word "ground" to reflect more accurately the language of Appendix A.

Paragraph f. and g. (formerly e. and f.) have not been changed.

With respect to the quality assurance contention and the backfitting contention, your letter properly notes that the parties have reached no agreement. The intervenors may pursue these issues further with the licensing board.

Your letter correctly notes that the witness list is one of possible witnesses.

The intervenors have stipulated that the ACRS letter, SER and supplments; and FSAR and supplements will be admitted into evidence and accorded whatever weight to which they are entitled.

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Finally, we believe its premature to discuss the order of presentation of testimony. That subject can be better addressed when it becomes more clear what kind of case each party is likely to present.

Yours very truly,

David St. Lischaber

DAVID S. FLEISCHAKER

cc: All parties of record

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DAVID S. FLEISCHAK

SUITE 3002 602 1025 15th Street, N.W. Washington, D.C. 20005

March 20, 1978



Mr. Edson G. Case, Acting Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Phillips Building 7920 Norfolk Avenue Bethesda, Maryland

Re:

RELATED CORRESPONDENCE

In the Matter of Pacific Gas & Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 & 2) Docket Nos. 50-275 O.L. and 50-323 O.L.

Dear Mr. Case:

I have received a copy of a letter from Mr. Barton W. Shackleford, Executive Vice-President, Pacific Gas & Electric Company, dated February 28, 1978. In his letter, Mr. Shackleford complains that the hearing schedule circulated by Mr. L. Dow Davis, Office of Executive Legal Director, NRC, shows a 30 day "slip" in the issuance of the staff Safety Evaluation Report ("SER"), Supplement 7, from April 1st - May 1st. Mr. Shackleford states that he knows of "no reason" for the slip and suggests that the schedule be revised to show issuance of the SER supplement on "the date orginally agreed upon" - April 1st.

Implicit in Mr. Shackleford's position is that the staff should bear the onus for a slip in the hearing schedule. That is not the case. As you are well aware, the staff's ability to adhere to a projected hearing schedule depends, in large part, upon the timing and sufficiency of the applicant's response to staff inquiries. Incomplete or untimely applicant submissions contribute to scheedule slippage. Two examples demonstrate the point. First, the applicant's recent submission on asymmetric loadings is not complete and should require further staff inquiry. Second, the applicant has yet to address how the Mr. Edson G. Case March 20, 1978 Page Two

substantial upgrading of the safe shutdown earthquake will affect selection of the operating basis earthquake. The staff is unable to issue a complete SER until it has received and reviewed the applicant's submission on these matters. And the same holds for other open items on the staff's review schedule.

The Commission has properly recognized that the Atomic Energy Act mandates "that the public safety is the first, last, and a permanent consideration in any decision on the issuance of a construction permit or a license to operate a nuclear facility."*/ Whatever interest the applicant has in expediting the licensing of this facility, it is subservient to assuring that operation of the facility will not jeopardize public health and safety.

The staff plays a central role in providing that assurance, and the task in this proceeding is formidable. Determining the adequacy of the seismic design of the two reactors at Diablo Canyon is an enormously complex problem. Many of the problems addressed in the review of this licensing application are new and unique to this facility. The proper resolution of these problems requires time. The staff's review should not be accelerated at the risk of compromising safety determinations. Too much is at stake.

Yours very truly,

David Stuschaler

DAVID S. FLEISCHAKER

cc: All parties of record

*/ Power Reactor Company v. Electricians, 367 U.S. 396 (1961) quoting from and upholding the Commission's earlier decision in that same case, <u>In re Power Reactor</u> Development Company, 1 AEC 128, 136 (1959).

PACIFIC GAS AND ELECTRIC COMPANY

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ATTGENEYS

Mr. John F. Stolz, Chief Light Water Reactors Branch No. 1 Division of Project Management U. S. Nuclear Regulatory Commission Washington, D. C. 20555

> Re: Docket No. 50-275-OL Docket No. 50-323-OL Diablo Canyon Units 1 & 2

Post 19-9-2-1-1-

Dear Mr. Stolz:

On January 24, 1978 we responded to your letter of November 22, 1977 regarding the Regulatory Staff's position on emergency power system designs for sustained degraded grid voltage conditions. The attached material, Emergency Power System Revisions, March 17, 1978, replaces Items 1, 2, 3, and 6 of Position 1 - additional points on page 2 of our response.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it to me in the enclosed addressed envelope.

Very truly yours,

Philip A. Crane, Jr.

Enclosures CC w/enc.: Service List

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EMERGENCY POWER SYSTEM REVISIONS MARCH 17, 1978

1. Selection of voltage and time set points is based upon the consequences of the initiated action, system and plant status, and the variable sensed.

Initial transfer of ESF loads from the unit to the Standby Startup Source is delayed only 0.8 to 2.3 seconds, depending upon the degree of low voltage, in order to maintain plant operation.

The delay in starting the diesel generators upon detection of Standby Startup low voltage varies from 1.0 second at 0 volts to 6.4 seconds at 90 percent voltage. This prevents nuisance diesel generator starts and, at the same time, minimizes the period when a backup power source is not immediately available.

As described above, initiation of load shedding requires coincident detection and a time delay variable from 4 seconds at 0 volts to 19 seconds at 90 percent voltage. This design is utilized to provide maximum availability and adequate protection for the ESF equipment and to prevent undesirable load shedding.

- 2. Coincident logic is employed as described above. Offsite power sources are not actually tripped because high voltage breakers are not opened. Coincident logic is therefore not required to prevent spurious trips.
- 3. Starting of the diesel generator is delayed 1 to 6.4 seconds upon sensing of a low voltage condition on the Standby Startup Source. This delay does not, however, reduce the availability of the offsite source should a backup be required because it is still the preferred source once adequate voltage is restored.
- 6. Each ESF bus has its own set of protection relay and transfer schemes. The function and installation of these schemes are designed in accordance with IEEE Std. 279-1971, "Criteria for Protection Systems for Nuclear Power Generating Stations." Because there are three ESF buses and only two are required for system operation, no single failure in degraded grid protection equipment would result in an unsafe condition.