

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

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In the Matter of )

PACIFIC GAS AND ELECTRIC COMPANY )

(Diablo Canyon Nuclear Power )  
Plant, Units 1 and 2) )  
\_\_\_\_\_ )

Docket No. 50-275  
Docket No. 50-323

GOVERNOR DEUKMEJIAN'S FIRST SUPPLEMENTAL  
ANSWERS TO APPLICANT PG&E'S SECOND SET OF  
INTERROGATORIES

Governor Deukmejian hereby provides this First Supplement to his answers to applicant PG&E's Second Set of Interrogatories. Please note that only those interrogatories whose answers are being supplemented are reproduced here.

INTERROGATORY NO. 1:

State each and every fact upon which you base your contention that the licensee has failed to timely develop and implement a systematic quality assurance/quality control program for the design of safety related structures, systems and components for design work at Diablo Canyon Units 1 and 2 since November 1, 1981.

ANSWERS TO INTERROGATORY NO. 1:

The following changes should be incorporated in Table 1:

<u>Description of Deficiency</u>	<u>Appendix B Criteria</u>	<u>Reference</u>
6. No Change	No Change	(add ) Check-lists of IDVP provided to Governor at the deposition of Roger Reedy.
17. Delete	Deletet	Delete
20. (add) As-built Configu- ration does not conform to PG&E piping specification	3,6,10,16	No Change

The following additions should be made to Table 1:

23. Differences between "as analyzed" and "as-built" bolt sizes	3,6,10,16	EIO 1120, EIO 1121
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<u>Description of Deficiency</u>	<u>Appendix B Criteria</u>	<u>Reference</u>
24. DCP analysis does not correctly consider the revised vertical and horizontal Hosgri spectra.	3,6,16	EIO 1143
25. Design analyses performed generically qualify vents and drains may not be conservative.	3,6,16	EIO 1144
26. Hosgri design response spectra for the contain- ment interior structure developed by DCP does not envelope raw spectra deve- loped by the IDVP.	3,6,16	EIO 3009
27. Differences between "as built" and as analyzed plant	3,6,10,16	ITR 59,61

INTERROGATORY NO. 2:

State each and every fact upon which you base your contention that the licensee's major subcontractor at Diablo Canyon Units 1 and 2 have failed to timely develop and implement a systematic quality of safety related structures, systems and components for design work at Diablo Canyon Units 1 and 2 since November 1, 1981.

ANSWER TO INTERROGATORY NO. 2:

During the deposition of PG&E's NRC, and IDVP personnel which were taken between September 20 and 28, 1983, those personnel, when asked to do so, were unable to develop an unambiguous list of design subcontractors employed for design work on Diablo Canyon Units 1 and 2 since November 1, 1980. In addition, these individuals were unable to provide the Governor with a complete list of design subcontractors working in the ITP offices under the Bechtel/PG&E QA Program as compared to design subcontractors working in their own offices under their own QA Program relied upon in making this supplemental answer are the depositions of Messrs. Morrill, Skidmore, Raymond, Anderson and Moore.

INTERROGATORY NO. 3:

Please list each and every major subcontractor for Diablo Canyon Units 1 and 2 who has been involved in the

design of safety related structures and/or systems and/or components.

(a) For each such subcontractor state:

- (i) the time period when the subcontractor did design of safety related structures, systems and components for Diablo Canyon Units 1 and 2.
- (ii) the time period you alleged when the subcontractor did not develop and implement a systematic quality assurance/quality control program.

ANSWER TO INTERROGATORY NO. 3:

See Supplemental answer to Interrogatories 1 and 2, above.

INTERROGATORY NO. 50:

State each and every fact upon which you base your allegation that the scope of the IDVP's review of the seismic design of safety related SS&Cs is too narrow.

ANSWER TO INTERROGATORY NO. 50:

ITR-9 and ITR-5 provide a list of design contractors for the seismic design of safety-related structures, systems, and components. While at this time the Governor has not completed an exhaustive list, the Governor's review to date indicates that the number of the contractors listed in ITR-9 provided design efforts which should have been included in the samples subject to the IDVP

review. Specifically, the Governor believes that in general subcontracted design efforts associated with licensing should have been appropriately reviewed by the IDVP. Further, the Commission 's November 19, 1981 order and the letter of the same date from Denton to Furbush specify that the IDVP will review design activities of all (or each) safety-related design service contractor. Also, see responses of the Governor to Interrogatories 7 and 8 in PG&E's Fourth Set of Interrogatories. PG&E's First Set of Interrogatories the IDVP has not questioned or discussed in their Final Report of any ITR the soil structure interaction model for the containment, horizontal analysis DE and DDE for containment; the possibility of uplifting of the mat of the containment for Hosgri and its effects; the uncoupling of the slabs of the Auxiliary building for vertical analysis; the finite element mode of auxiliary buildings, the springs representing the columns and the input motions are the base of these springs; the input motion applied at the base of the soil springs for the Auxiliary building; the lack of consideration of hydrodynamic pressures on the oceanside of the intake structure; or the effect of the increase by 10% of the horizontal motion to account for accidental eccentricity for other loading conditions, than the ones selected in their samples.

INTERROGATORY NO. 56:

State each and every fact upon which you base your allegation that the IDVP did not verify samples from each of the non-seismic design activities.

ANSWER TO INTERROGATORY NO. 56:

See answer to Interrogatory 50 insofar as the design chain that performed the non-seismic design activities it did review.

ANSWER TO INTERROGATORY NO. 58:

Also relied upon are the depositions of Mr. Sestak and Dr. Cooper.

INTERROGATORY NO. 60:

State each and every fact upon which you base your allegation that the number samples obtained for the non-seismic design activities the IDVP did verify are insufficient to provide mathematically verifiable conclusions about even those activities.

ANSWER TO INTERROGATORY NO. 60:

Also relied upon are the depositions of Mr. Sestak and Dr. Cooper.

INTERROGATORY NO. 64:

State each and every fact upon which you base your allegation that the IDVP has accepted deviations from the equipment standards set forth in PG&E's license commitments without providing an adequate engineering justification for the change.

ANSWER TO INTERROGATORY NO. 64:

The instances upon which the Governor bases the design quality contentions are specified in the restated Contentions of Governor Deukmejian and Joint Intervenors, filed September 8, 1983. September 29, 1983. In addition, Contention 4, parts (a) through (u) list the cases in support of the Governor's contention that the IDVP accepted deviations from PG&E licensing commitments without providing an adequate engineering justification.

INTERROGATORY NO. 66:

State each and every fact upon which you base your allegation that the IDVP has failed to ascertain the root cause of the deviation from PG&E's license commitments and the regulatory requirements that it was and is discovering.

ANSWER TO INTERROGATORY NO. 66:

The body of the initial response to Interrogatory NO. 66 remains current. However, the specific listing of EOI's provided in Table 66.1 and 66.2 are replaced in their entirety by Revision 1 to these two Tables which are attached to this answer. Also relied upon are the depositions of Messrs. Schierling, Sestak, and Reedy, and Dr. Cooper.

INTERROGATORY NO. 68:

State each and every fact upon which you base your allegation that the IDVP has failed to verify independently that all safety related structures, systems, and components at Diablo Canyon meet PG&F's licensing commitments.



ANSWER TO INTERROGATORY NO. 68:

Additional information concerning sampling procedures and criteria were provided by the Governor in his response to PG&E's Fourth Set of Interrogatories. Particularly, PG&E is directed to the Governor's response at this time is the same as given in the "Answers of Governor Deukmejian to Applicant's Second Set of Interrogatories," dated August 30, 1983. Also relied upon are the depositions of Mr. Schierling, Mr. Sestak, and Dr. Cooper.

INTERROGATORY NO. 72:

State each and every fact upon which you base your allegation that the IDVP has failed to verify that modeling by PG&E of soils properties for the containment building is justified and proper.

ANSWER TO INTERROGATORY NO. 72:

Also relied upon are the depositions of Dr. Kuo and Mr. Polk.

INTERROGATORY NO. 94:

State each and every fact upon which you base your allegation that the IDVP has failed to verify that PG&E's modeling of torsion factors by differing techniques for different buildings is conservative and properly done.

ANSWER TO INTERROGATORY NO. 94:

Also relied upon are the depositions of Dr. Kuo and Mr. Polk.



INTERROGATORY NO. 108:

State each and every fact upon which you base your allegation that the IDVP has no systematic program for verifying that the design of equipment supplied to PG&E from its subcontractors met PG&E's license commitments for such equipment.

ANSWER TO INTERROGATORY NO. 108:

The Governor notes that, pursuant to the restated Contentions of Governor Deukmejian and Joint Intervenor filed on September 8, 1983, the scope of the Contention is limited by the Board's August 26, 1983 Order to equipment supplied to PG&E by Westinghouse. Also, see the answer to Interrogatory No. 26 provided by the Governor in response to PG&E's Fourth Set of Interrogatories. Also relied upon are the depositions of Messrs Schierling, Sestak, and Morrill and of Dr. Cooper.

INTERROGATORY NO. 114:

State each and every fact upon which you base your allegation that the IDVP has failed to require PG&E to implement a corrective and preventative action program that is sufficient to assure that the seismic design deficiencies that have been uncovered do not exist in other unexamined portions of the plant or will not be repeated in future design documents.

ANSWER TO INTERROGATORY NO. 114:

Table 1, as supplemented herein, provides a listing of examples which demonstrate inadequate corrective action

measures by PG&E which in general resulted from the IDVP's review of the Diablo Canyon Corrective Action Program.

INTERROGATORY NO. 116:

State each and every fact upon which you base your allegation that the IDVP has failed to look for the root cause of the discrepancies it has found in the seismic design.

ANSWER TO INTERROGATORY NO. 116:

Also relied upon are the depositions of Messrs. Sestak, Reedy, Morrill, Schierling, and of Dr. Cooper.

INTERROGATORY NO. 118:

Also relied upon are the depositions of Messrs. Sestak, Reedy, Morrill, Schierling and of Dr. Cooper.

INTERROGATORY NO. 124:

State each and every fact upon which you base your allegation that the IDVP has failed to recognize the generic nature of a number of the non-seismic design deficiencies uncovered.

ANSWER TO INTERROGATORY NO. 124:

The body of the initial response to Interrogatory No. 124 remains current. However, the specific listing of EOIs provided in Table 101 is replaced in its entirety by Revision 1 to the Table which is attached to this answer. Also relied upon are the depositions of Messrs. Sestak and Reedy, and of Dr. Cooper.

INTERROGATORY NO. 128:

State each and every fact upon which you base your allegation that the IDVP has no systematic program for reviewing whether the seismic design modifications it has requested that PG&E perform have occurred.

ANSWER TO INTERROGATORY NO. 128:

Also relied upon are the depositions of Mr. Sestak, Mr. Morrill and Dr. Cooper.

INTERROGATORY NO. 132:

State each and every fact upon which you base your allegation that PG&E's Internal Technical Program ("ITP") does not provide assurance, equivalent to Appendix B compliance, that PG&E has and will meet its license commitments for the seismic design of SS&C's at Diablo Canyon.

ANSWER TO INTERROGATORY NO. 132:

A listing of instances where the ITP seismic verification fails to provide assurance, equivalent to Appendix B compliance, is set forth in the restated Contentions of Governor George Deukmejian, dated September 8, 1983. In addition, further specification of contentions on design quality assurance arising out of the materials which have been released to date are set forth by the Governor in his filing to the Board on September 29, 1983.

INTERROGATORY NO. 138:

For each even numbered interrogatory from number 50 through number 130, state specifically (section #, page and line, etc.) where in the regulations, the Commission order of November 19, 1981, the Denton letter of November 19, 1981, or the IDVP's Phase I and II program plans that the activity (or lack thereof) by the IDVP you allege did (or did not) take place is required to take (or not take) place.

ANSWER TO INTERROGATORY NO. 138:

The regulatory or license commitment not complied with for the matters encompassed by Contention 4 are specifically set forth by the Governor in his restated contentions dated September 8, 1983. In general, the license of NRC requirement for which the Governor's review indicates either the ITP or the IDVP has failed to assure compliance is set forth in the specific responses provided by the Governor.

INTERROGATORY NO. 143:

For each answer to these interrogatories, and all subparts thereto, identify each person who participated in the preparation of your answers pursuant to 10 C.F.R. section 2.740b(b).

ANSWER TO INTERROGATORY NO. 143:

All answers partially prepared by Susan Durbin, Deputy Attorney General. All answers except those to

Interrogatories Nos. 72 and 94 partially prepared by Peter Kaufman, Deputy Attorney General. Answers to Interrogatories Nos. 1, 2, 3, 50, 56, 64, 66, 68, 108, 114, 124, 132 and 138 partially prepared by Richard Hubbard of MHB Technical Associates. Answers to Interrogatories Nos. 3 and 50 partially prepared by Dr. Jose Roesset.

DATED: OCTOBER 7, 1983

Respectfully submitted,

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Table 66.1 (Revision 1)

LISTING OF EOI RESOLUTIONS WHERE ROOT CAUSE WAS NOT ADDRESSED

(Revised)

<u>EOI</u>	<u>ITR</u>	<u>COMMENTS</u>
7001	42	Closed by IDVP; root cause of error was not addressed.
7002	48	Closed by IDVP; root cause of error was not addressed.
7003	42	Closed by IDVP; root cause of error was not addressed. Rather, the adequacy was justified by analysis.
8001	47	Closed by IDVP; concern proved to exist generically, but safety significance was not addressed in ITR, nor was root cause of errors. PG&E is now resolving any design implications in its Iterative Design Process.
8010	46	Closed by IDVP; concern proved to exist generically. The IDVP did not address the safety significance in ITR, or the root cause of the errors. PG&E is now performing a general reanalysis.
8011	21	Closed by IDVP; root cause of error was not addressed.
8012	45	Closed by IDVP; root cause of error was not addressed.
8014	21	Closed by IDVP; resolution omitted mention of four out of six components identified in original EOI. Root cause of error was not addressed, nor were potential generic implications.
8015	22	Closed by IDVP; root cause of the error was not addressed, nor were the possible negative effects of not requiring flow testing which the IDVP itself identified.
8016	45	(Same as for 8012 above.)
8017	49	Closed by IDVP; concern proved to exist generically. The IDVP did not address the safety significance in the ITR, or the root cause of the error. PG&E is performing a general review and making modifications as necessary.



<u>EOI</u>	<u>ITR</u>	<u>COMMENTS</u>
8020 8021	18	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis.
8023 8024 8025 8026	24	Closed by IDVP; root cause of the error was not addressed, nor were the potential generic implications. The error was resolved by modifications.
8031	21	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis. Some of the affected equipment was transferred to EOI File 8064.
8035	18	Closed by IDVP; root cause of the error was not addressed. Rather, the error was resolved by modifications.
8036	18	Closed by IDVP; root cause of the error was not addressed.
8038 8039	18	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis.
8044	26	Closed by IDVP; root cause of the error was not addressed.
8045	24	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis.
8050	21	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis.
8051	27	Closed by IDVP; root cause of the error was not addressed.
8053	28	Closed by IDVP; root cause of the error was not addressed.
8056	28	(Same as for 8053 above.)
8057	49	(Same as for 8017 above.)
8060	22	Closed by IDVP; root cause of the error was not addressed. The error was resolved by modifications.
8063	25	Closed by IDVP; root cause of the error was not addressed. The error was resolved by modifications.
8065	48	Closed by IDVP; root cause of the error was not addressed. Rather, the adequacy was justified by analysis.



Table 66.2 (Revision 1)

Summary of Table 66.1ROOT CAUSE OF ERROR NOT ADDRESSED

	<u>GENERIC CONCERN</u>	<u>RESOLVED BY MODIFICATION</u>	<u>RESOLVED BY ANALYSIS</u>	<u>OTHER</u>
<u>TOTAL</u>	4	7	9	10
<u>EOIs</u>	8001	8023	7003	7001
	8010	8024	8020	8011
	8017	8025	8021	8014
	8057	8026	8031	8015
		8035	8038	8036
		8060	8039	8044
		8063	8045	8048
			8050	8051
			8065	8053
				8056

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
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In the Matter of )  
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PACIFIC GAS AND ELECTRIC COMPANY )

(Diablo Canyon Nuclear Power )  
Plant, Units 1 and 2) )  
)

Docket Nos. 50-275 O.L.  
50-323 O.L.

CERTIFICATION

I, Susan L. Durbin, hereby certify:

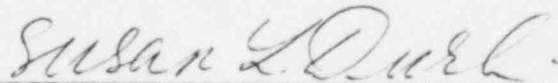
1. I am one of the attorneys for Governor George Deukmejian in the above-entitled matter and, as such, am authorized to execute this certification.

2. I have read the foregoing Governor Deukmejian's First Supplemental Answers to Applicant PG&E's Second Set of Interrogatories and know the contents thereof.

3. I am informed and believe the answers to said Answers to 3 & 50 to be true and correct.

I certify under penalty of perjury that the foregoing is true and correct.

Executed at Los Angeles, California, on October 7, 1983.

  
SUSAN L. DURBIN