

NOV 27 1974

Docket No. 50-133

Pacific Gas and Electric Company  
ATTN: Mr. Frederick T. Searls  
Vice President and General  
Counsel  
77 Beale Street  
San Francisco, California 94106

Gentlemen:

This letter confirms our telephone conversation with members of your staff on November 20, 1974, concerning the analysis of emergency core cooling system (ECCS) performance for the Humboldt Bay Power Plant Unit No. 3 required prior to reactor startup following the present refueling outage.

The Determination by the Director of Regulation, dated August 5, 1974, extended at your request, the time for submission of an analysis of ECCS performance in accordance with the requirements of 10 CFR 50.46 and Appendix K, until March 31, 1975, provided a preliminary evaluation was submitted by October 31, 1974. On October 31, 1974, you requested a waiver of the requirements for a preliminary evaluation or a further extension to submit such preliminary evaluation until March 31, 1975 -- the same time as that for submission of the complete Appendix K analysis. Our letter of November 1, 1974, granted an extension only until the end of the present refueling outage scheduled for completion on December 6, 1974, in the absence of further justification. Your letter of November 1, 1974, provided further information to support your requested waiver of the preliminary evaluation requirement.

As indicated by our staff in the telephone conversation of November 20, 1974, we conclude that your November 1, 1974 letter is inadequate to support an extension beyond the end of this refueling. Among the matters discussed was the absence of consideration of fuel densification effects in connection with analysis of performance under the Interim Acceptance Criteria and the

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general absence of consideration of fuel densification in connection with plant transients. We also discussed your preliminary survey of the likely results of a preliminary evaluation of performance in accordance with the August 5, 1974 Determination.

As stated in that conversation, you should provide, as promptly as possible, and, in any event, before resumption of operation from the present refueling outage, the following analysis with appropriate proposed Technical Specification changes.

1. An analysis of the ECCS for proposed Cycle 10 core using the Interim Acceptance Criteria (IAC) which indicates that all IAC requirements are met. The analysis shall include fuel densification considerations in conformity with our letter dated August 19, 1974, and the information enclosed therewith. Any changes to the Humboldt Bay Technical Specifications required to meet the IAC requirements with densification shall be submitted as promptly as possible, so that they can be reviewed and acted upon by the Atomic Energy Commission prior to reactor operation with the Cycle 10 core.
2. An evaluation of all plant transients and accidents to quantify the effects of fuel densification on the Cycle 10 core. Changes in Technical Specifications should be proposed as necessary and should also be submitted as promptly as possible for review and action prior to operation.
3. A preliminary analysis of ECCS for the proposed Cycle 10 core using a conservative assessment of ECCS performance in accordance with the requirements of the Determination by the Director of Regulation dated August 5, 1974. The submittal should discuss both the quantitative and qualitative assumptions used in the evaluation with a determination of the effect on ECCS performance, i.e. improves or degrades fuel clad temperatures, and an estimate of the magnitude of change. Any changes to the Humboldt Bay Technical Specifications required to meet the Appendix K criteria shall be submitted with the preliminary analysis.

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In accordance with the August 5, 1974 Determination by the Director of Regulation, the Humboldt Bay facility shall be operated within the limits of both the proposed technical specifications based on the preliminary analysis performed to satisfy Appendix K criteria and the technical specifications for IAC until we have completed our review of your final Appendix K submittal due by March 31, 1975 and have approved appropriate technical specifications.

If you believe, as you indicated in the telephone conversation, that there is justification for full power operation regardless of the results from your analysis until the evaluation is completed in accordance with 50.46 and Appendix K, which is to be submitted by March 31, 1975, your justification should be submitted along with the analyses, described above. Three signed originals and thirty-seven copies of these submittals should be provided.

If you feel the need for further technical discussions to comply with the requirements outlined in this letter, the staff would be pleased to assist you to the extent we can. Please contact Mr. D. Ziemann to set up a meeting with the appropriate staff members.

Sincerely,

Original signed by:  
Karl R. Goller

Karl R. Goller, Assistant Director  
for Operating Reactors  
Directorate of Licensing

cc:  
Philip A. Crane, Jr.  
Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, California 94106

Anthony Z. Roisman, Esquire  
Berlin, Roisman and Kessler  
1712 N Street, N. W.  
Washington, D. C. 20036

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SEE PREVIOUS YELLOW FOR OTHER CONCURRENCES

OFFICE	FAnderson:aw	TR	OGC	L:AD/OR	L:DD/RP	L:DL
SURNAME	DLZiemann	VStello	JScinto	KRGoller	AGiambusso	EGCase
DATE	11/27/74	11/ /74	11/ /74	11/27/74	11/ /74	11/27/74

general absence of consideration of fuel densification in connection with plant transients. We also discussed your preliminary survey of the likely results of a preliminary evaluation of performance in accordance with the August 5, 1974 Determination. We indicated that you were excessive in the conservatism of certain of your assumptions which reflected out-of-date information.

As stated in that conversation, you should provide, as promptly as possible, and, in any event, before resumption of operation from the present refueling outage, the following analysis with appropriate proposed Technical Specification changes.

1. An analysis of the ECCS for proposed Cycle 10 core using the Interim Acceptance Criteria (IAC) which indicates that all IAC requirements are met. The analysis shall include fuel densification considerations in conformity with our letter dated August 19, 1974, and the information enclosed therewith. Any changes to the Humboldt Bay Technical Specifications required to meet the IAC requirements with densification shall be submitted as promptly as possible, so that they can be reviewed and acted upon by the Atomic Energy Commission prior to reactor operation with the Cycle 10 core.
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In accordance with the August 5, 1974 Determination by the Director of Regulation, the Humboldt Bay facility shall be operated within the limits of both the proposed technical specifications based on the preliminary analysis performed to satisfy Appendix K criteria and the technical specifications for IAC until we have completed our review of your final Appendix K submittal due by March 31, 1975 and have approved appropriate technical specifications.

If you believe, as you indicated in the telephone conversation, that there is justification for full power operation regardless of the results from your analysis until the evaluation is completed in accordance with 50.46 and Appendix K, which is to be submitted by March 31, 1975, your justification should be submitted along with the analyses, described above. Three signed originals and thirty-seven copies of these submittals should be provided.

If you feel the need for further technical discussions to comply with the requirements outlined in this letter, the staff would be pleased to assist you to the extent we can. Please contact Mr. D. Ziemann to set up a meeting with the appropriate staff members.

Sincerely,

Edson G. Case  
Acting Director of Licensing

cc:  
Philip A. Crane, Jr.  
Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, California 94106

Anthony Z. Roisman, Esquire  
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	L:ORB #2					
OFFICE	FAAnderson:aw	TRC 22	OGC	L:AD/OR	L:DD/RS	L:DL
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DATE	11/26/74	11/ /74	11/ /74	11/26/74	11/ /74	11/ /74

4. In accordance with the August 5, 1974 Determination by the Director of Regulation, the Humboldt Bay facility shall be operated within the limits of both the proposed technical specifications based on the preliminary analysis performed to satisfy Appendix K criteria and the technical specifications for IAC until we have completed our review of your final Appendix K submittal due by March 31, 1975 and have approved appropriate technical specifications.

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SURNAME ➤	DLZiemann	VStello	JScinto	KRGoller	AGiambusso	EGCase
DATE ➤	11/25/74	11/ /74	11/ /74	11/ /74	11/ /74	11/ /74

Pacific Gas and Electric Company - 3 -

August 5, 1974  
The Department of Regulation

4. In accordance with ~~Section 50.46 of 10 CFR Part 50~~, the Humboldt Bay facility shall be operated within the limits of both the proposed technical specifications based on the preliminary analysis performed to satisfy Appendix K criteria and the technical specifications for IAC until we have completed our review of your final Appendix K submittal due by March 31, 1975 and have approved appropriate technical specifications.

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