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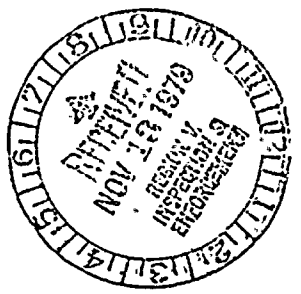
November 9, 1979

Mr. R. H. Engelken, Director
Office of Inspection and Enforcement
Region V
U. S. Nuclear Regulatory Commission
1990 N. California Boulevard
Walnut Creek Plaza, Suite 202
Walnut Creek, California 94596



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

Dear Mr. Engelken:

Enclosed is our response to IE Bulletins Nos. 79-05C and 79-06C.

Very truly yours,

Philip A. Crane, Jr.

Enclosure

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INTRODUCTION

IE Bulletin 79-05C and 79-06C requested holders of operating licenses for PWR facilities to undertake short and long term actions required as a result of preliminary analyses of Reactor Coolant Pump operation during a LOCA situation. Though we do not yet have operating licenses for Diablo Canyon Units 1 and 2, we have elected to reply to Bulletins 79-05C and 79-06C.

SHORT TERM

BULLETIN ITEM 1A

In the interim, until the design change required by the long-term action of IE Bulletins 79-05C and 79-06C has been incorporated, institute the following actions at your facilities:

a. Upon reactor trip and initiation of HPI caused by low reactor coolant system pressure, immediately trip all operating RCPs.

PGandE RESPONSE

These interim actions will be instituted prior to initial power operation of the Diablo Canyon units in the event that the revised operating procedures and operator training described in 4 below have not been accomplished. This assumes that the NRC Staff is in agreement with the Westinghouse Operating Plant Owner's Group position regarding manual (rather than automatic) tripping of the Reactor Coolant Pumps as discussed under Long Term below. If this matter has not been resolved, these interim actions would also be instituted prior to initial power operation of the units.

BULLETIN ITEM 1B

In the interim, until the design change required by the long-term action of IE Bulletins 79-05C and 79-06C has been incorporated, institute the following actions at your facilities:

b. Provide two licensed operators in the control room at all times during operation to accomplish this action and other immediate and followup actions required during such an occurrence. For facilities with dual control rooms, a total of three licensed operators in the dual control room at all times meets the requirements of these Bulletins.

PGandE RESPONSE

We are committed to have three licensed operators at all times in the Diablo Canyon dual Control Room by initial power operation.

BULLETIN ITEM 2

Perform and submit a report of LOCA analyses for your plants for a range of small break sizes and a range of time lapses between reactor trip and pump trip. For each pair of values of the parameters, determine the peak cladding temperature (PCT) which results. The range of values for each parameter must be wide enough to assure that the maximum PCT or, if appropriate, the region containing PCTs greater than 2200 degrees F is identified.

PGandE RESPONSE

A series of Loss of Coolant Accident (LOCA) analyses for a range of break sizes and a range of time lapses between initiation of break and pump trip applicable to the 2, 3 and 4 loop plants has been performed by the Westinghouse Owner's Group. A report summarizing the results of the analysis of delayed Reactor Coolant Pump trip during small loss of coolant accidents for Westinghouse NSSS, WCAP-9584, was submitted to Mr. D. F. Ross by Mr. Cordell Reed on August 31, 1979. In the report, maximum PCTs for each break size considered and pump shutoff times have been provided. The report concludes that if the reactor coolant pumps are tripped prior to the reactor coolant system pressure reaching 1250 psia, the resulting peak clad temperatures are less than or equal to those reported in the FSAR. In addition, it is shown that there is a finite range of break sizes and RCP trip times in all cases 10 minutes or later, which will result in PCTs in excess of 2200°F as calculated with conservative Appendix K models. The operator in any event would have at least 10 minutes to trip the RCPs following a small break LOCA, especially in light of the conservatisms in the calculations. This is appropriate for manual rather than automatic action, based on the guidelines for termination of RCP operation presented in WCAP-9600.

BULLETIN ITEM 3

Based on the analyses done under Item 2 above, develop new guidelines for operator action, for both LOCA and non-LOCA transients, that take into account the impact of RCP trip requirements. For Babcock & Wilcox designed reactors, such guidelines should include appropriate requirements to fill the steam generators to a higher level, following RCP trip, to promote natural circulation flow.

PGandE RESPONSE

The Westinghouse Owner's Group has developed guidelines which were submitted to the NRC in Section 6 and Appendix A of WCAP-9600. The analyses provided as the response to Item 2 are consistent with the guidelines in WCAP-9600. No changes to these guidelines are needed for both LOCA and non-LOCA transients.

BULLETIN ITEM 4

Revise emergency procedures and train all licensed reactor operators and senior reactor operators based on the guidelines developed under Item 3 above.

PGandE RESPONSE

The Owner's Group effort to revise emergency procedures covers many issues, including operation of the Reactor Coolant Pumps. The action taken in response to Item 1 is sufficient as an interim measure and no immediate need exists for changing our emergency procedures to include the tripping of the Reactor Coolant Pumps. The expected schedule for revising the LOCA, steamline break and steam generator tube rupture emergency procedures is

the following:

Mid-October:	Guidelines which have been reviewed by the NRC will be provided to each utility. Appropriate utility personnel associated with writing procedures will meet with the Owner's Group Subcommittee on Procedures and Westinghouse to provide the background for revising their emergency procedures.
1 to 2 months from Mid-October:	Plant specific procedures will be revised.
3 to 4 months from Mid-October:	Revised procedures will be implemented and operators trained.

BULLETIN ITEM 5

Provide analyses and develop guidelines and procedures related to inadequate core cooling (as discussed in Section 2.1.9 of NUREG-0578, "TMI 2 Lessons Learned Task Force Status Report and Short-Term Recommendations") and define the conditions under which a restart of the RCPs should be attempted.

PGandE RESPONSE

Analyses related to inadequate core cooling and definition of conditions under which a restart of the Reactor Coolant Pumps should be attempted will be performed. Resolution of the requirements for the analyses and an acceptable schedule for providing the analyses and guidelines and procedures resulting from the analyses will be arrived at between the Westinghouse Owner's Group and the NRC Staff.

LONG TERM

BULLETIN ITEM 1

Propose and submit a design which will assure automatic tripping of the operating RCPs under all circumstances in which this action may be needed.

PGandE RESPONSE

As discussed in our response to short-term Item 2, we do not believe that automatic tripping of the Reactor Coolant Pumps is a required function based on the analyses that have been performed and the guidelines that have been developed for manual Reactor Coolant Pump tripping. We propose that this item be discussed with the NRC Staff following their review of the Owner's Group Submittal.