

December 6, 1993

Docket Nos. 50-275  
and 50-323

Mr. Gregory M. Rueger  
Nuclear Power Generation, B14A  
Pacific Gas and Electric Company  
77 Beale Street, Room 1451  
P.O. Box 770000  
San Francisco, California 94177

Dear Mr. Rueger:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO ASME CODE RELIEF  
REQUEST FOR A BLOCK VALVE DOWNSTREAM OF A RELIEF VALVE FOR POSITIVE  
DISPLACEMENT PUMP AT DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 1  
(TAC NO. M86194) AND UNIT NO. 2 (TAC NO. M86195)

By letter dated April 13, 1993, Pacific Gas and Electric Company (PG&E) requested relief from ASME Code section III, subsection NC-7142 for a block valve installed downstream of a relief valve for the positive displacement pump. By letter dated April 15, 1993, the NRC staff determined that your proposed alternatives were acceptable on an interim basis until an in-depth review was completed by the staff. We have determined that additional information is necessary. Enclosed is a request for additional information (RAI) that is needed to complete our review. We request that you respond to the RAI within 60 days of your receipt of this letter.

This request for information affects fewer than 10 respondents. Therefore, it is not subject to Office of Management and Budget review under Pub. L. 96-511.

Please contact me should you have any questions regarding this request.

Sincerely,

Original signed by:

Sheri R. Peterson, Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:  
As stated

cc w/enclosures:  
See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Please contact me should you have any questions regarding this request.

Sincerely,

A handwritten signature in cursive script that reads "Sheri R. Peterson".

Sheri R. Peterson, Project Manager  
Project Directorate V  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:  
As stated

cc w/enclosures:  
See next page



REQUEST FOR ADDITIONAL INFORMATION  
RELIEF REQUEST FROM ASME CODE SECTION III, SUBSECTION NC-7142  
BLOCK VALVE DOWNSTREAM OF RELIEF VALVE FOR POSITIVE  
DISPLACEMENT PUMP AT DIABLO CANYON UNITS 1 AND 2

In the submittal dated April 13, 1993, the licensee states that the Chemical and Volume Control System (CVCS) positive displacement pump (PDP) is required for the following two functions:

- For boration flow as required by Technical Specification (T/S) 3.1.2.3 and 3.1.2.4.
- For post-fire safe shutdown to meet 10 CFR 50, Appendix R requirements.

The submittal also postulates that if block valve 831 (CVCS-1-831 and CVCS-2-831) is inadvertently closed, the bonnet of drain valve 54 or the discharge flange of RV-8116 would deform to effectively relieve system pressure. However, it is noted that with block valve 831 closed, back pressure at the relief valve discharge, either present due to a small leak through the relief valve or built up as the relief valve begins to open, could cause the relief valve not to open at all or immediately reseal. This could prevent the discharge line from being pressurized as postulated such that excessive system pressure would not be relieved. Even if the relief valve design is such that back pressure would not cause the relief valve to remain closed or immediately reseal, the valve response time could be adversely affected. Since the pressurization rate from the PDP discharge can be very large if the system is completely isolated, it would appear that this could result in the rupture of the piping on the inlet side of the relief valve rather than on the outlet side which would then effectively disable the PDP. Therefore, the inadvertent closure of block valve 831 could result in the inability of the PDP to perform the above safety functions.

1. Please describe the above safety functions in more detail including how important they are to plant safety.
2. Please provide information about any alternative capability to perform these functions in the event the PDP is inoperable.



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Mr. Gregory M. Rueger  
Pacific Gas and Electric Company

Diablo Canyon

CC:  
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c/o U.S. Nuclear Regulatory Commission  
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