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*Resp LPT 90-13*  
James D. Shiffer  
Senior Vice President and  
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Nuclear Power Generation

August 13, 1990

PG&E Letter No. DCL-90-204



U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Re: Docket No. 50-323, OL-DPR-82  
Diablo Canyon Unit 2  
Reply to Notice of Violation in NRC Inspection Report No.  
50-323/90-13

Gentlemen:

NRC Inspection Report No. 50-323/90-13 (Inspection Report), dated July 13, 1990, contained a Notice of Violation citing two Severity Level IV violations regarding maintenance activities on the Unit 2 turbine-driven auxiliary feedwater pump speed governor. PG&E's response to the Notice of Violation is provided in Enclosure 1. The Inspection Report also requested that PG&E address failure of management systems to identify and pursue the resolution of problems in a timely manner. A status of PG&E's actions to address this concern is provided in Enclosure 2.

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

Sincerely,

J. D. Shiffer

cc: A. P. Hodgdon  
J. B. Martin  
P. J. Morrill  
P. P. Narbut  
H. Rood  
CPUC  
Diablo Distribution  
INPO

Enclosures

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ENCLOSURE 1

REPLY TO NOTICE OF VIOLATION IN NRC  
INSPECTION REPORT NO. 50-323/90-13

On July 13, 1990, as part of NRC Inspection Report No. 50-323/90-13 (Inspection Report), NRC Region V issued a Notice of Violation citing two Severity Level IV violations for Diablo Canyon Power Plant (DCPP) Unit 2. The statements of violation and PG&E's responses follow.

A. STATEMENT OF VIOLATION

Section 6.8.1 Of the Diablo Canyon Technical Specifications states, in part, "Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978."

Regulatory Guide 1.33, Revision 2, Appendix A, Section 9a, states that maintenance that can affect the performance of safety-related equipment shall be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Licensee Procedure NPAP-C-40, Revision 3, General Requirements for Plant Maintenance Programs, paragraph 4.16.1 states in part that maintenance which can affect the performance of safety related equipment shall be performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

1. Contrary to the above, work order C0056311, which provided the instructions for the replacement of the Unit 2 turbine driven auxiliary feedwater pump speed governor, was not appropriate to the circumstances in that recommended vendor instructions for venting the governor were not provided in the work order. Consequently, venting was not performed, and when the turbine was operated on April 24, 1990, the turbine overspeed. A potential overpressure condition for the auxiliary feed system was prevented by actuation of the turbine overspeed trip mechanism.

This is a Severity Level IV violation, applicable to Unit 2 (Supplement I).



#### REASON FOR THE VIOLATION IF ADMITTED

PG&E acknowledges that the violation occurred as described in the Inspection Report due to a failure of the work planner to properly reference the vendor manual in the work order. The work order failed to specifically reference the manual requirement to vent the governor following completion of the maintenance activity. The independent review of the work order did not identify that the instructions were lacking essential information.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The Work Planning Center personnel have been tailboarded on the need to reference specific portions of a vendor manual when referencing the vendor manual for required activities. A maintenance engineer, system engineer, and a mechanic have recently attended the Woodward governor training program.

#### CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

The following corrective actions will be taken to address the cause of this violation:

1. A maintenance procedure will be developed for the installation and maintenance of a Woodward governor for auxiliary feedwater pump speed control that will ensure proper venting.
2. The recurring preventive work order will be revised to reference the new maintenance procedure for installation and maintenance of the Woodward governor.
3. A specific work planning policy will be issued to clarify how to address vendor manuals in work orders.
4. Quality Control personnel will be tailboarded on the need for specific portions of a vendor manual to be referenced for required activities.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PG&E is in compliance with the provisions of NPAP C-40, Revision 3. The four actions listed above will be completed by September 1, 1990.



## B. STATEMENT OF VIOLATION

Section 6.8.1 of the Diablo Canyon Technical Specification states, in part, "Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978."

Regulatory Guide 1.33, Revision 2, Appendix A, Section 9a, states that maintenance that can affect the performance of safety-related equipment shall be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Licensee Procedure NPAP-C-40, Revision 3, General Requirements for Plant Maintenance Programs, Paragraph 4.16.1 states in part that maintenance which can affect the performance of safety related equipment shall be performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Contrary to the above, maintenance was not performed in accordance with work order C0056311 for the replacement of the Unit 2 turbine driven auxiliary feedwater pump speed governor. Specifically, when the work was accomplished on April 23, 1990: prerequisite step F (briefing) was not performed; Step 3 (recording turbine speed) was signed by the mechanic, but the speed was not recorded; Step 4 (recording leak check results) was signed by the mechanic, but the leak check results were not recorded; and Step 6 (review by foreman) was signed by the mechanic and not by the foreman.

This is a Severity Level IV violation, applicable to Unit 2 (Supplement I).

### REASON FOR THE VIOLATION IF ADMITTED

The scope of work order (WO) C005311 (activity 2) was to adjust the Woodward speed control governor. WO C005311 was being performed in conjunction with Surveillance Test Procedure P-6B, "Routine Surveillance Test of Steam-Driven Auxiliary Feedwater Pump" to test the governor and adjust the speed control subsequent to a previous work order activity (activity 1) which involved replacing the governor. Prerequisite step F required that a tailboard be conducted with the system engineer and the vendor representative, if available. The vendor representative and system engineer were present during the testing of the governor and performance of WO C005311 (activity 2). The maintenance mechanic thought that the tailboard had been conducted as part of the testing performance and signed off the activity. In fact, the tailboard had not been conducted and, therefore, prerequisite step F had not been performed.





Step 3 of WO C005311 required recording of the actual speed achieved. The actual speed achieved was recorded and documented on STP P-6B by the system engineer. The mechanic noted that the speed was recorded as part of STP P-6B and signed off the step. Therefore, this step was appropriately accomplished. PG&E agrees that the documentation of this step would have been improved if the mechanic had recorded a reference to STP P-6B for documentation of the achieved speed or if he had recorded the speed in the work order.

Step 4 required that inspection for leakage and the results be documented on the WO summary sheet. However, Step 4 did not have a sign off block on the work order similar to the other steps in the work order. The mechanic performed the leakage inspection and detected no leaks. The mechanic did not record the results on the WO summary since the step was not required to be signed off and the inspection results for leakage were negative.

Step 6 required that the foreman ensure that all signatures were entered on the work order and that all work performed and parts used were entered on the work order summary sheet. The mechanic signed off this step instead of the foreman. The foreman, however, did sign off the entire work order as part of his review of the work order and confirmed that the requirements of step 6 were performed. However, the foreman should have noted that the mechanic signed off step 6, and the foreman should have correctly completed the step by also signing as required.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Tailboards of all maintenance personnel were conducted to reemphasize the proper method of signing off work steps.

#### CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

A maintenance bulletin will be issued to all maintenance personnel describing this event; the bulletin will discuss verbatim compliance with WO requirements and further emphasize and explain the proper method of signing off work order steps.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PG&E believes that full compliance was achieved following completion of the maintenance tailboards. The maintenance bulletin will be issued by August 30, 1990.



## ENCLOSURE 2

## CONCERNS REGARDING MANAGEMENT SYSTEMS WEAKNESSES

## NRC Concern:

The Inspection Report identified weaknesses regarding the timeliness of PG&E's management systems in establishing the root cause of problems and in implementing corrective actions to prevent recurrences. The management systems designed to recognize, raise, and pursue the resolution of problems were lacking during the report period.

## PG&amp;E Response:

In addition to the Technical Review Groups convened to address the technical issues associated with the NOVs, on July 27, 1990, the Senior Vice President and General Manager assigned the Quality Assurance Manager to lead a special Event Investigation Team (EIT) to address the management issues. The EIT initiated a nonconformance report and is presently evaluating the timeliness of PG&E actions in response to several recent events.

The initial EIT meeting was held on July 30, 1990, and NCR DCO-90-QA-N004 was initiated to investigate the identified weaknesses. A chronology for three events (AFW pump overspeed, Unit 2 load rejection, and positive displacement pump piping leakage) has been developed. The EIT interviewed 22 individuals associated with these events to determine the factors that contributed to the untimely issuance of NCRs and event investigation. Based on the results to date, procedural and organizational changes may be necessary. It is anticipated that the procedural changes will focus on (1) improvements in decisive ownership of problems, (2) timely preparation of NCRs and convening of TRGs for evaluation of causes and identification of corrective actions, and (3) improvements in feedback mechanisms to increase management awareness of problem resolution.

The EIT report is scheduled for issuance to the Senior Vice President and General Manager by August 30, 1990. Following management review and concurrence on corrective actions to be taken, a supplemental response on this matter will be submitted to the NRC by October 1, 1990.

