

Pacific Gas and Electric Company

77 Beale Street  
San Francisco, CA 94106  
415/972-7000  
TWX 910-372-6587

James D. Shiffer  
Vice President  
Nuclear Power Generation

January 2, 1990

PG&E Letter No. DCL-90-002

01/02/90 10:23



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

Re: Docket No. 50-275, OL-DPR-80  
Docket No. 50-323, OL-DPR-82  
Diablo Canyon Units 1 and 2  
Reply to Notice of Violation in NRC Inspection  
Report Nos. 50-275/89-23 and 50-323/89-23

Gentlemen:

NRC Inspection Report Nos. 50-275/89-23 and 50-323/89-23 (Inspection Report), dated December 1, 1989, contained a Notice of Violation citing three Severity Level IV violations regarding performance of work without appropriate controls, excess overtime worked, and a lack of proper administrative controls. PG&E's response to the Notice of Violation is provided in the enclosure.

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  
M. M. Mendonca  
P. P. Narbut  
H. Rood  
CPUC  
Diablo Distribution  
INPO

Enclosure

2971S/0075K/JHA/2164

~~9001090135~~ (8 pp)



## ENCLOSURE

REPLY TO NOTICE OF VIOLATION IN NRC  
INSPECTION REPORT NOS. 50-275/89-23 AND 50-323/89-23

On December 1, 1989, as part of NRC Inspection Report Nos. 50-275/89-23 and 50-323/89-23 (Inspection Report) for Diablo Canyon Power Plant (DCPP) Units 1 and 2, a Notice of Violation was issued citing three Severity Level IV violations. The statements of violation and PG&E's responses are as follows:

## A. STATEMENT OF VIOLATION

10 CFR Part 50, Appendix B, Criterion III, states in part: "Measures shall be established to assure that applicable regulatory requirements and the design basis, ... as specified in the license application ... are correctly translated into specifications, drawings, procedures, and instructions." The licensee's FSAR, Chapter 3.2, Table 3.2-3, provides that vital heat tracing is Design Class I. Further, Licensee Design Criteria Memorandum DCM E-20, dated January 26, 1982, requires that heat tracing on Design Class 1 boric acid piping, which includes piping from the Boric Acid Tanks to the Boron Injection Tanks to the Reactor Coolant System, be treated as Design Class 1." FSAR Section 3.2.1 states that "... the requirements of the DCPP Quality Assurance Program apply to all structures, components, and systems classified as Design Class 1."

Contrary to the above, work was performed on heat tracing between the Boric Acid Tanks and the Boron Injection Tanks between July 1985 and December 1988, but the requirements of the licensee's Quality Assurance Program were not translated into the work specifications.

This is a Severity Level IV violation applicable to Units 1 and 2.

REASON FOR THE VIOLATION IF ADMITTED

PG&E acknowledges that the violation occurred as described in the Inspection Report. As stated in the Inspection Report, at the time of the event, the Q-List did not adequately identify the Quality Class I portions of the heat trace system, resulting in the inappropriate classification of heat trace work orders issued in November 1988. As described below, this situation was due to inadequate administrative controls concerning revision of the Q-List.

In January 1984, Revision 4 of the DCPP Q-List indicated 28 heat trace circuits to be treated as Class 1E circuits. Revisions 7 and 8 of the Q-List (dated March 1987 and March 1988, respectively) indicated that circuits between the Boric Acid Injection Tank (BIT) and the RCS to be Class 1E. Circuits between the Boric Acid Storage Tank (BAST) and the BIT was omitted



from this list. However, Revision 9 of the Q-List (dated November 1988) corrected the omission and included both groups of circuits (BIT-RCS and BAST-BIT) as Class 1E circuits.

In November 1988, two work orders were issued to maintain/repair heat trace circuits. At that time, the component data base was in the process of being updated to incorporate Revision 9 of the Q-List. Since the update had not been completed, erroneous component data base information was applied to the work orders by work planning.

From the above, it was concluded that the absence of an adequate procedure for revision of the Q-List introduced the error in Revision 7 and 8 of the Q-List which led to the violation.

#### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Corrective steps taken are described below.

1. The subject work orders were reviewed and it was determined that only heat trace cables and controllers had been replaced. Selected heat trace cables had been replaced with like cables. Some controllers had been replaced with non-identical controllers. To verify that the mounting of the controllers conforms to qualification requirements, a walkdown program to visually inspect the controllers has been initiated. Walkdowns of systems outside containment have been completed and results indicate that the controllers are properly mounted for seismic qualification. Walkdowns of systems inside containment will be completed during the next Unit 1 and Unit 2 outages of sufficient duration but no later than the next refueling outage of each unit.
2. Maintenance procedures were examined to determine if there is any significant difference between Class 1E and non-Class 1E maintenance. It was determined that, except for QC inspection, Class II circuits receive the same treatment as Class 1E circuits. Therefore, it was concluded that during the period when the circuits were classified as Class II circuits, they were maintained as Class 1E circuits without QC inspection.
3. As discussed in the Inspection Report, eight data entry errors had been made to the component data base for heat tracing components. These data entries were corrected and it was concluded that these errors did not contribute to the inappropriate classification of work orders.

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

The Q-List procedure, NEMP 3.1, "Classification of Structures, Systems, and Components," will be revised to require an evaluation of all classification changes for possible effect on the Diablo Canyon design basis and operations and maintenance activities. Any changes to the Q-List which have an impact on operations or maintenance activities or which would change the design basis



will be implemented by the formal PG&E design change process. This process requires a multi-level management and multi-disciplinary review to ensure design acceptability and accuracy. Existing Administrative Procedure AP E-53, "Change Control Program for the PIMS Component Data Base," provides adequate instructions for the control and updating of the component data base to incorporate Q-List changes as a result of revisions in design documents.

PG&E believes that the corrective steps identified above will preclude recurrence of similar events or violations regarding the Q-List.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PG&E is in full compliance with the requirements for application of the Quality Assurance Program to work affecting the Diablo Canyon Q-List. NEMP 3.1 will be revised by January 30, 1990.





## B. STATEMENT OF VIOLATION

Technical Specification 6.2.2, "Plant Staff," paragraph f., provides that an individual "... who performs safety related functions ... should not be permitted to work more than ... 72 hours in any 7 day period, all excluding shift turnover time ... Any deviation from the above guidelines shall be authorized by the Plant Manager or his designee ..."

Contrary to the above, between October 6 and November 3, 1989, at least 11 Mechanical Maintenance and 7 Electrical Maintenance workers performing key safety related functions worked in excess of 72 hours in 7 day periods, excluding shift turnover time, without authorization by the Plant Manager or his designee.

This is a Severity Level IV violation applicable to Units 1 and 2.

### REASON FOR THE VIOLATION IF ADMITTED

PG&E acknowledges that plant management inadvertently allowed a number of personnel performing safety-related activities to work overtime in excess of the Technical Specification (TS) restriction. This occurred because of the lack of specific guidance in administrative procedures on the applicability and implementation of the TS overtime restriction.

In response to the NRC Resident Inspector's specific concerns identified in the Inspection Report regarding maintenance personnel exceeding their allowable overtime hours, the maintenance manager took interim action by issuing a memo to all maintenance foreman establishing a work hours policy more restrictive than that stated in the TS. Due to the staggered shift coverage during the Unit 1 refueling outage, some delay was experienced in the collection of employee time records and promulgating the manager's memo to all maintenance personnel. This time delay resulted in four additional electrical workers exceeding their allowed overtime without prior approval. A small fraction of their excess overtime involved work on safety related equipment.

### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The following corrective steps have been taken:

1. A memo from the Plant Manager has been issued to all plant personnel informing them of the administrative requirements and individual responsibilities regarding the TS overtime restriction.
2. A review of all plant personnel overtime records was conducted to determine the extent of the problem regarding exceeding the TS overtime restriction. Some of the identified personnel exceeding the TS overtime



restriction were interviewed to determine the specific work they were involved in to assess any potential impact on plant safety. The review concluded that a small percentage of the total number of engineers and operators were performing safety related work. The specific work tasks performed by these personnel were reviewed by plant management to assess the effects of excessive overtime work on plant safety. From this review, it was concluded that the overtime work would not adversely affect work performance or plant safety.

3. Department supervisors and time clerks were instructed by the Assistant Plant Manager/Support Services to manage employee work hours in a more controlled manner by reviewing personnel time sheets on a regular basis to confirm compliance with the TS restriction on overtime.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

Administrative Procedure AP A-8, "Overtime and Emergency Relief Restrictions," will be revised to clarify which personnel are affected by the TS restriction on overtime, and to provide clear direction to supervisors and plant personnel regarding compliance with the overtime restriction.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PG&E is in full compliance with the TS overtime restriction. Administrative Procedure AP A-8, "Overtime and Emergency Relief Restrictions," will be revised and issued by February 15, 1990 to prevent recurrence.



### C. STATEMENT OF VIOLATION

Technical Specification 3.6.1.1 states that containment integrity shall be maintained in Modes 1, 2, 3, and 4.

Technical Specification Surveillance requirement, section 4.6.1.1, states in part that primary containment integrity shall be demonstrated

'At least once per 31 days by verifying that all penetrations ... not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions ...'

Contrary to the above, from startup in 1984 and 1985, respectively, while in Mode 1, 2, 3, and 4 until on May 9, 1989, Unit 1 and Unit 2 containment hydrogen purge penetrations inside containment isolation valves FCV 658 and FCV 659 and outside containment isolation valves FCV 668 and FCV 669 were closed but not deactivated and secured in their positions.

This is a Severity Level IV violation applicable to Units 1 and 2.

### REASON FOR THE VIOLATION IF ADMITTED

PG&E acknowledges that the violation occurred as described in the Inspection Report. The containment hydrogen sample valves (FCV-235, FCV-236, FCV-237, FCV-238, FCV-239 and FCV-240) and the containment purge to auxiliary building filters external hydrogen recombiner exhaust valves (FCV-658, FCV-659, FCV-668 and FCV-669) were closed but not deactivated and secured in their positions. This occurred because of a misinterpretation of requirements. Since the subject valves are remotely operated and not automatic containment isolation valves, the valves' status was considered to be in compliance with TS 4.6.1.1.a. The misinterpretation occurred because the valves were closed and their position verified by observation of the control room valve position lights. However, a reevaluation of General Design Criteria (GDC) 56, Standard Review Plant Section 6.2.4, and the TS intent regarding containment isolation valves being secured in the closed position indicated that the subject valves are to be secured as identified in the Inspection Report.

### CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Immediate corrective actions were taken by Operations and Engineering to ensure that the recombiner line and sample line valves are secured in their closed positions.



1. The breakers for recombiner line valves FCV-658, FCV-659, FCV-668, and FCV-669 were racked out and sealed open. The control power fuses for sample line valves FCV-235, FCV-236, FCV-237, FCV-238, FCV-239, and FCV-240 were removed and controlled by an administrative tag-out. These actions deenergize the control switches and red/green position indications. However, the monitor lights in the control room are powered from a separate power supply, therefore continuing to verify valve position.
2. Surveillance Test Procedure STP I-1D, "Routine Monthly Checks," was revised to use the monitor lights as position indication for the recombiner line valves and the sample line valves.
3. Operating procedures OP K-10B1, "Sealed Valve Checklist for Containment Manual Isolation Valves (Inside Containment)," and OP K-10B2, "Sealed Valve Checklist for Containment Manual Isolation Valves (Outside Containment)," were revised to specifically identify the breakers to be sealed open for the recombiner line valves FCV-658, FCV-659, FCV-668, and FCV-669.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS.

PG&E believes that the above actions will ensure that the subject valves remain secured in their position. Additionally, PG&E is evaluating a design change to add keylocked control switches to the subject valves to provide a more convenient means of administrative control.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PG&E is in full compliance with the Technical Specification requirement to deactivate the valves.

