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February 23, 1996



PG&E Letter DCL-96-61

James Lieberman Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20852 -2738

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 Enforcement Action 95-279

(NRC Inspection Report Nos. 50-275/95-17 and 50-323/95-17)

Dear Mr. Lieberman:

NRC Enforcement Action 95-279, dated January 25, 1996, contained a Notice of Violation (NOV) that cited one Severity Level III violation and proposed imposition of a civil penalty in the amount of \$50,000. The violation involved a failure to follow procedures and was associated with the failure of Auxiliary Transformer 1-1 during the Unit 1 seventh refueling outage. The notice also contained one Severity Level IV violation relating to procedural controls for approval of overtime. PG&E's response to the NOVs is enclosed, including a check for full payment of the civil penalty payable to the Treasurer of the United States.

PG&E agrees with the NRC that one of the primary root causes of this event was a lack of effective procedures for the control of electrical grounding devices, due primarily to the failure of either Diablo Canyon Power Plant's Operations or Maintenance Department assuming clear and full ownership and responsibility for such devices. PG&E also agrees that although the event itself did not compromise safety, the failure to maintain configuration control over electrical devices resulted in the event and its unnecessary challenge to plant safety systems.

As noted by the NRC, PG&E's corrective actions in response to the event were prompt and comprehensive. PG&E established an Event Investigation Team (EIT) to provide a complete and timely understanding of the event and to initiate corrective actions. The results of the EIT investigation are summarized in the attached response to the

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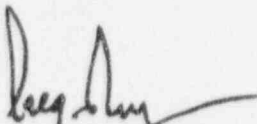
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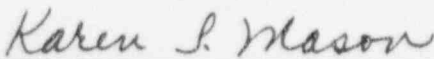
Severity Level III violation. PG&E believes that effective controls for grounding devices and Operations Department's ownership of systems returned to service have been established. In addition, the long-term corrective actions we have undertaken should result in improved procedural adherence.

Although not directly related to the transformer event, PG&E also implemented more rigorous overtime controls and modified its outage schedule to reduce the need for overtime. This is in response to the Severity Level IV violation.

Sincerely,


Gregory M. Rueger

Subscribed and sworn to before me
this 23rd day of February, 1996
State of California, County of
San Luis Obispo



Notary Public

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REF LY TO NOTICE OF VIOLATION IN NRC ENFORCEMENT ACTION 95-279

On January 25, 1996, as part of NRC Inspection Report Nos. 50-275/95-17 and 50-23/95-17, NRC Region IV issued Enforcement Action 95-279 that contained a Notice of Violation citing one Severity Level III and one Severity Level IV violation for Diablo Canyon Power Plant (DCPP) Unit 1. The statement of violation and PG&E's response follow.

STATEMENT OF VIOLATION A

During an NRC inspection conducted on various dates between October 21 and December 8, 1995, violations of NRC requirements were identified in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. Violations Assessed a Civil Penalty

Diablo Canyon Technical Specification 6.8.1 states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978.

Appendix A of Regulatory Guide 1.33, Revision 2, recommends procedures for equipment control and the startup and operation of offsite and onsite electrical systems.

- 1. Inter-Departmental Administrative Procedure OP2.IDI, Revision 2, "DCPP Clearance Process," Step 4.4.3 requires the clearance coordinator to list clear concise clearance points, including electrical grounding points.*

Contrary to the above, on October 5, 1995, Clearance CR00049276 was issued without listing clear concise electrical grounding points, in that the instructions were to install two ground buggies "if necessary." 01013

- 2. Operating Procedure OP J-5:IV, Revision 6, "12KV Breaker Code Order," Step 6.5, "To Install and Remove Grounding Devices," requires that an approved switching form (69-9147) be used for the installation of a grounding device.*

The switching form for Clearance CR00049276 requires that a ground buggy be installed on the load side of 12 kv circuit breaker 52-VD-4.

Contrary to the above, on October 6, 1995, electrical maintenance personnel did not install the ground buggy for Clearance CR00049276 on the load side; instead electrical maintenance personnel installed the ground buggy on the bus side of 12 kv circuit breaker 52-VD-4 and signed verification on the switching form that the ground buggy had been installed on the load side of 12 kv circuit breaker 52-VD-4. 01023.

3. Operating Procedure OP J-5:IV, Revision 6, "12kV Breaker Code Order," Step 6.5 requires that an operator will observe the completion of each switching step by the electrician and hang or remove the appropriate tag. The switching log for the ground buggy to be installed in the location of 12 kv Bus D circuit breaker 52-VD-4 in accordance with Clearance CR00049276 requires that the operator sign verification for proper installation of the grounding device.

Operating Procedure OP J-5:III, Revision 3, "12kV Bus D and E - Shutdown and Clearing," Step 6.5 requires that if work is to be performed on the bus, the Electrical Department will install grounds under the observation of a qualified operator. The switching log for the ground buggy to be installed in the location of circuit breaker 52-VD-4 in accordance with Clearance CR00049276 requires the operator sign verification for proper installation of the grounding device.

Contrary to the above, on October 6, 1995, a grounding buggy was installed by electrical maintenance personnel in the location of circuit breaker 52-VD-4 in accordance with Clearance CR00049276 without observation or verification by an operator. 01033

4. Technical Maintenance Services Procedure MP E-57.11B, Revision 8, "Installing and Removing Grounds from Deenergized Power Plant Electrical Equipment," Paragraph 7.1, Part A: "Installation of Ground Buggies," Step 7.1.22, requires personnel to hang a Ground Installed Tag on cubicle door, hang a Caution Tag on the ground buggy, and log the Caution Tag per CF4.ID5.

Inter-Departmental Administrative Procedure CF4.ID5, "Control of Lifted Circuitry, Process Tubing and Jumpers During Maintenance," Step 5.2.4 requires personnel to record the equipment location code number or any other specific information that identifies the location where the circuit has

been lifted on the Status Sheet. Step 5.6 requires personnel to document on the Status Sheet the installation and removal of all tags and out-of-service conditions which are not controlled and documented via an approved written procedure.

Contrary to the above, on October 6, 1995, electrical maintenance personnel installed a ground buggy on 12 kv Bus D but did not record the location of the ground buggy or log the Caution Tag on the Status Sheet. 01043

5. *Technical Maintenance Services Procedure MP E-57.11B, Revision 8, "Installing and Removing Grounds from Deenergized Power Plant Electrical Equipment," Step 2.2 requires that a clearance shall not be reported off until all ground buggies have been properly removed.*

Contrary to the above, on October 21, 1995, an electrical maintenance foreman reported off Clearance CR00049276 with a ground buggy still installed on 12 kv bus D. 01053

6. *Interdepartmental Administrative Procedure OP2.ID1, Revision 2, "DCPP Clearance Process," Step 5.11.7 requires that plant operators shall perform all switching and valving to return the equipment to service. Clearance CR00049276, Section V requires that operators remove and verify ground buggies on 12 kv bus D.*

Contrary to the above, on October 21, 1995 operators returned equipment to service for Clearance CR00049276 without removing or verifying removal of a ground buggy installed under Clearance CR00049276 on 12 kv bus D. 01063

*These violations represent a Severity Level III problem (Supplement I).
Civil Penalty - \$50,000*

REASON FOR THE VIOLATION

PG&E agrees with the violation as stated in the inspection report.

Immediately following the event, PG&E implemented an Event Investigation Team (EIT) inspection to establish a complete and timely understanding of the circumstances leading to the failure of Auxiliary Transformer 1-1 and to initiate corrective actions. In addition to the causal factors of the event, the EIT also identified lessons learned on fire protection and loss of power. PG&E's findings regarding root causes and

contributory causes were discussed in detail in the NRC's December 29, 1995, Inspection Report and in PG&E's presentation at the January 12, 1996, NRC Predecisional Enforcement Conference. In summary, PG&E concluded that the following were root causes for this event:

1. Procedures did not effectively control grounding devices.
 - a. The division of responsibilities between the Operations and Maintenance Departments was unclear.
 - b. The clearance and work order processes were inadequate to ensure that grounding devices were removed.
 - c. Grounding device labeling was inadequate.
2. Procedures/work instructions were not followed.
3. The transformer failed faster than protective relays could operate.
4. Past corrective actions on previous grounding device problems were ineffective.

Although not a direct cause of the event, the following contributing causes were also identified by the EIT:

1. Failure to adequately document previous grounding device problems.
2. The work schedule of the temporarily upgraded work foreman.
3. Training of the temporary work foreman was not adequate.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

Grounding Device Controls

The following immediate corrective actions were taken to adequately control grounding device installation:

1. Grounding device installation was restricted pending additional instructions.
2. All installed grounding devices were identified.
3. Interim grounding device controls were implemented.
4. Training was conducted on the interim controls.

Final grounding device administrative procedures have since been issued. The formal operations clearance process is now used to control bus grounding device installation and removal. Improved lamacoids/labels were installed for the bus grounding devices.

Prior to energizing equipment, a maintenance foreman and plant operator each performs independent walkdowns of the bus. These new administrative procedures clearly define the responsibilities between the Operations and Maintenance Departments for grounding device installation and removal.

Procedure Adherence

The following immediate corrective actions were taken:

1. Individuals directly involved with the events leading up to and causing the transformer were counseled.
2. A memorandum discussing this event and its causes was sent from the Senior Vice President - Nuclear Power Generation (NPG) to all NPG personnel. This memorandum also restated management's expectations for procedural adherence.
3. The EIT findings were presented by senior management to NPG personnel at a series of employee meetings.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

The following additional actions are being taken:

Performance Standards for Error Reduction

A review and a series of "Town Hall Meetings" with all employees were conducted to determine the most prevalent and significant sources of actual and potential errors at DCP. The results were analyzed by each NPG Director and 1996 error reduction focus areas for each organization have been recommended. Senior management is in the process of reviewing and endorsing these focus area recommendations and the action plans developed by each director.

Procedure Adherence

Each director, general foreman, and supervisor will meet individually with senior management to ensure management procedural adherence expectations are understood and implemented. In addition, each director whose section is involved in the use of procedures has selected procedure non-adherence as one of their 1996 error reduction areas of focus and has developed specific action plans to enhance procedural adherence in their sections. Also, management has scheduled one of the on-going supervisor workshop program sessions to reemphasize management expectations for procedural adherence.

An action plan is being developed to simplify administrative procedures that see high usage and that have experienced procedure adherence problems. In addition, 1996 procedural adherence focus areas are being established. The Unit 2 seventh refueling

outage (2R7) focus areas will be clearances, tagging, foreign material exclusion, confined space entry, and overtime. There will be active participation by first line supervisors, directors, Quality Control, human performance evaluation system, and Procedure Services to emphasize adherence to these administrative procedure requirements and to report procedure requirement non-adherences.

A "conduct of work" document will be developed for use by maintenance personnel. This document will be an easy to follow and a ready reference document which will assist employees in being aware of the various applicable administrative requirements.

Corrective Action Effectiveness

A non-conformance report (NCR) was initiated to comprehensively review the corrective action program. The Technical Review Group (TRG) evaluating this NCR is chaired jointly by the Vice President - Nuclear Technical Services and the Vice President - Diablo Canyon Operations and Plant Manager. The TRG is reviewing outstanding and recently closed corrective actions to ensure that these actions will be effective in preventing recurrence of problems. The Plant Staff Review Committee process has been modified to review non-conformance corrective actions sooner to ensure that prompt and appropriate corrective actions are being taken and that follow-up actions are comprehensive and timely.

Problem Documentation

Management expectations were reemphasized regarding the need to maintain a low problem reporting threshold. To improve error trending, Procedure OM7.ID10, "Quality Trend Analysis Program," was revised to establish guidelines on trending lower level problems that are not necessarily quality problems. The barrier trend codes were also revised to implement a less complex coding system and facilitate increased use by the line organizations.

Temporary Supervisor Training

A temporary maintenance supervisor qualification guide was developed. This guide sets forth training and qualification requirements for managing the work control process and for communication and leadership in procedure adherence.

Transformer Withstand Capability

The fault withstand capability of the main station and auxiliary transformers was evaluated with the assistance of an outside contractor. The evaluation concluded that transformer withstand capability is adequate in all cases for single phase to ground faults, but in older transformers may not be adequate for three phase to ground close in faults like that experienced. The Unit 1 Auxiliary Transformer 1-1 will be replaced with a design having greater withstand capability prior to commencing 2R7 (Reference PG&E letter DCL-96-025 dated January 18, 1996). An action plan to improve the withstand capabilities of other critical transformers will be developed by the start of 2R7.

Fire Protection

A comprehensive evaluation of the fire protection aspects of the event was completed. Based on the results of the evaluation, an action plan is being developed to enhance the DCPD fire protection programs it relates to this event.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

The supervisor workshops, individual discussions with management supervisors, and error reduction performance standards will be completed prior to 2R7 beginning on April 6, 1996. The conduct of work document will also be published for use prior to 2R7. The transformer withstand capability improvement action plan will be completed prior to 2R7. The fire protection enhancement program action plan will be completed prior to 2R7.

II. Violations Not Assessed a Civil Penalty

STATEMENT OF VIOLATION B

Diablo Canyon Technical Specification 6.2.2.f states, in part, " ... during extended periods of shutdown for refueling ... the following guidelines shall be followed: ... An individual should not be permitted to work ... more than 72 hours in any 7-day period ... excluding shift turnover time ... Routine deviation from the above guidelines is not authorized."

Contrary to the above, between September 30, 1995 and October 30, 1995, licensee management routinely authorized Technical Maintenance Section personnel to work more than 72 hours in a 7-day period. Approximately 44% of the temporary Technical Maintenance Section personnel were repeatedly authorized to work more than 72 hours in a 7-day period. Approximately 25-30% of the permanent Technical Maintenance Section personnel were repeatedly authorized to work more than 72 hours in a 7-day period. 02014

This is a Severity Level IV violation (Supplement I).

REASON FOR THE VIOLATION

PG&E agrees with the violation as stated in the inspection report. Based on a review of recent outage performance, PG&E concludes that management expectations regarding approval of non-routine overtime deviations from technical specifications were not met. PG&E has concluded that the approval level for overtime deviations was delegated to too low of a level in the NPG organization. Also, actions should have been taken to ensure that outages are planned in a way that minimizes the need for extensive overtime.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

The following corrective actions have been taken:

1. Personnel were informed that no overtime exceeding six days shall be approved without the Vice President - Diablo Canyon Operations and Plant Manager, or the Vice President - Nuclear Technical Services prior approval.
2. A directive was issued to plan 2R7 with a six day work schedule.
3. A NCR was initiated on overtime practices.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

Procedure OM14.ID1 "Overtime Restrictions," will be revised to require that no overtime exceeding six days shall be approved without the Vice President - Diablo Canyon Operations and Plant Manager, or the Vice President - Nuclear Technical Services prior approval.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Procedure OM14.ID1 will be revised prior to commencing 2R7.