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JAMES D. SHIFFER
VICE PRESIDENT
NUCLEAR POWER GENERATION

September 8, 1987

PGandE Letter No.: DCL-87-216

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 a Notice of Violation in EA 87-131

Gentlemen:

NRC Enforcement Action Letter EA 87-131 dated August 7, 1987, contained a Notice of Violation citing five Severity Level IV violations. Inspection Report No. 50-323/87-18, dated June 19, 1987 (NUREG-1269) provides findings of the NRC Region V Augmented Inspection Team (AIT) regarding these violations.

PGandE's response to this Notice of Violation is provided in the enclosure. The enclosure includes response to both EA-87-131 and applicable NUREG-1269 findings and references PGandE actions provided in PGandE letters DCL-87-099, 136, and 198.

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

Sincerely,

for J.D. Shiffer

Enclosure

cc: L. J. Chandler
J. B. Martin
M. M. Mendonca
P.P. Narbut
B. Norton
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Diablo Distribution

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ENCLOSURE

RESPONSE TO NOTICE OF VIOLATION IN
NRC ENFORCEMENT ACTION LETTER EA 87-131

On August 7, 1987, NRC Region V issued a Notice of Violation (Notice) citing five Severity Level IV violations for Diablo Canyon Power Plant Unit 2. A statement of the violations and PGandE's response is as follows:

A. STATEMENT OF VIOLATION

Technical Specification 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the activities in Appendix A of Regulatory Guide 1.33. Appendix A of Regulatory Guide 1.33 specifies that procedures are required for the draining of the reactor coolant system.

Operating Procedure OP-A-2-II Revision 1 and On-The-Spot-Change (OTSC) dated April 10, 1987, "Reactor Vessel - Draining the Reactor Coolant System" specify that drain down for steam generator tube draining should be done to an elevation of 108 feet and cautions that vessel level should not be allowed to drop below 107 feet 3 inches.

Contrary to the above on April 10, 1987, during the day shift the reactor coolant system was drained to an elevation of 107 feet 3 inches to permit draining of the steam generator tubes. Subsequently, the level was allowed to drop to 106 feet 6 inches resulting in cavitation or vortexing of the RHR pump in service.

Later that day, the vessel level was again reduced, this time to 107 feet 0 inches. After this reduction, a loss of reactor coolant system inventory due to leaking boundary valves resulted in RHR pump cavitation and temporary loss of both pumps for a period of approximately one and one half hours.

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

REASON FOR THE VIOLATION IF ADMITTED

PGandE acknowledges that the violation occurred as described in the Enforcement Action Letter.

As described in Inspection Report No. 50-323/87-18 (NUREG-1269), two On-The-Spot-Changes were made to Operating Procedure (OP) A-2:II, Revision 1, dated August 15, 1986, in an attempt to clarify instructions to operators during reactor vessel draining operations. PGandE agrees with the findings in NUREG-1269 that (1) these changes were largely illegible due to multiple reproductions, and (2) that OP A-2:II specified conflicting information regarding the minimum RCS levels to be maintained during mid-loop operations. The operators involved in draining the reactor coolant system should have stopped and obtained a legible copy and questioned the inconsistency in the specified minimum RCS level.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

As described in PGandE letter DCL-87-099, dated May 4, 1987, OP A-2:II has been revised and reissued to clarify the RCS level to be maintained during mid-loop operation, and incorporates all previous On-The-Spot-Changes.

As described in PGandE Letter DCL-87-136, dated June 15, 1987, the following steps have been taken to ensure that PGandE management expectations regarding procedure compliance are understood by the DCPP staff:

1. The Vice President, Nuclear Power Generation, met with the operating staff, stressing PGandE management expectations regarding procedural compliance, in a series of six meetings between May 15 and May 20, 1987.

2. The Vice President, Nuclear Power Generation, met with the DCPP plant staff on June 3, 1987 to address PGandE management expectations for DCPP regarding procedural compliance.

3. To provide assurance that employees understand and endorse the importance of procedural compliance, PGandE has issued a management expectations document (dated June 11, 1987) identifying those elements that each person should be pursuing on a daily basis to promote a professional and quality conscious organization at all levels. Management expectations are being and will be reemphasized through the use of posters, TV monitors, and seminars.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

PGandE actions being taken to improve procedural compliance are also described in PGandE letters DCL-87-136 and DCL-87-198. These actions include:

1. Periodic management meetings with plant personnel to ensure clear communication of management expectations regarding procedure compliance.

2. A discussion of management expectations regarding procedure compliance as part of formal training programs and seminars.

3. Continuing additional emphasis on procedural compliance during QC inspections and surveillances.

4. Assignment of a higher priority to processing procedure changes.

5. Implementation of a procedure upgrade program to modify procedures to reflect more closely INPO procedure format and content recommendations, including human factor considerations.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE is presently in full compliance and will continue to focus management attention on procedural compliance.

B. STATEMENT OF VIOLATION

10 CFR Part 50, Appendix B, Criterion V, states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings and shall be accomplished in accordance with these instructions, procedures or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria.

Quality Control Inspection Plan QCI No. 87-0469, issued April 4, 1987, for the inspection of the temporary Reactor Vessel refueling level instrumentation system requires, in part, that a QC specialist visually examine the completed configuration to verify the modifications. The QC acceptance criteria in this inspection plan require the completed configuration to be accurately reflected in the prepared drawing. The applicable prepared drawing is Drawing Change Notice (DCN) No. 2 to Drawing SJ-38525.

Contrary to the above, the QC inspection of the temporary reactor vessel level instrumentation was not properly accomplished in accordance with the procedure or drawing. A QC inspector indicated acceptance by stamping and dating the aforementioned acceptance criteria on the inspection plan on April 9, 1987, but had not inspected for the requirements of the DCN other than to verify the model numbers of the pressure transmitters. As installed, the temporary system did not have continuous upward sloped tubing as required by the DCN.

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

REASON FOR THE VIOLATION, IF ADMITTED

PGandE acknowledges that the violation occurred as described in the Enforcement Action Letter and as further described in NUREG-1269. The Quality Control inspector focused on the I&C aspects and verified that the proper model of the pressure transmitter had been installed and calibrated but did not visually examine the completed configuration to verify that the installation was accurately reflected in the "as-built" drawing.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

A discussion was held with all Quality Control inspectors concerning the QC activities relating to this event. As described in PGandE Letter DCL-87-136, dated June 15, 1987, a new procedure, QCP 3.1, Revision 0, "Design Change Activities", has been issued to implement an additional level of review of DCNs by QC Engineering. This further review is to ensure that important design details are specifically called out as inspection points on QC inspection plans.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

PGandE believes that actions taken as described above and the increased management attention to quality control activities as described in PGandE letter DCL-87-136 are sufficient to preclude recurrence.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE is presently in full compliance.

C. STATEMENT OF VIOLATION

10 CFR Part 50.59 states, in part, that the holder of the license may conduct tests not described in the safety analysis report, without prior Commission approval, unless the proposed test involves an unreviewed safety question. This section also provides that the licensee shall maintain records of tests. These records must include a written safety evaluation which provides the bases for the determination that the test does not involve an unreviewed safety question.

Diablo Canyon Procedure AP E-4S6, Revision 4, dated April 28, 1986, requires that the 10 CFR 50.59 reviews for an unreviewed safety question determination be documented on Form Number 69-11918.

Contrary to the above, Temporary Procedure TO-8702, RHR Pump Cavitation Test, Revision 0, was issued by the licensee on April 12, 1987 and was performed on April 12, 1987, but the cavitation test was not described in the FSAR and no written safety evaluation, on Form No. 69-11918 or other facility record, was prepared.

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

REASON FOR THE VIOLATION IF ADMITTED

PGandE acknowledges that the violation occurred as described in the Enforcement Action Letter, and as further described in NUREG-1269. The Plant Safety Review Committee (PSRC) discussed the safety significance of conducting the RHR pump cavitation test in accordance with the temporary procedure, and concluded that the test did not present either an unreviewed safety question or change to the Technical Specifications. The PSRC approved the proposed test on the assumption that a written safety evaluation had been prepared for the conduct of a similar test on Unit 1. However, it was later determined that the conditions of the Unit 1 test were different and not applicable to the Unit 2 test.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

In order to ensure that written safety evaluations have been properly documented, instructions have been given to the PSRC secretary to ensure that written safety evaluations are prepared for all applicable documents prior to PSRC review.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

Nuclear Plant Administrative Procedure A-2, "Plant Staff Review Committee (PSRC)," will be revised to require that the PSRC Secretary ensure that all required written safety evaluations and reviews have been satisfactorily completed for procedure and design changes requiring such evaluations before they are presented to the PSRC for review and approval.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE is presently in full compliance. Procedure A-2 will be revised by October 1, 1987.

D. STATEMENT OF VIOLATION

Technical Specification 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33. Appendix A of Regulatory Guide 1.33 specifies that procedures are required for the loss of shutdown cooling.

ANSI N18.7 - 1976/ANS-3.2 is approved by the NRC Staff as an acceptable method of operation under Regulatory Guide 1.33. Paragraph 5.3 of ANSI N18.7 states that activities affecting safety shall be described by written procedures of a type appropriate to the circumstances. These procedures shall provide an approved and preplanned method of conducting operations.

Contrary to the above, Procedure OP AP-16, Malfunction of the RHR System , Revision 0, was inadequately established in that it did not cover loss of RHR in mid-loop operation, except for notification instructions. This inadequate procedure was in effect during the loss of RHR cooling on April 10, 1987.

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

REASON FOR THE VIOLATION IF ADMITTED

PGandE acknowledges that the violation occurred as described in the Enforcement Action Letter and as further described in NUREG-1269. Abnormal Operating Procedure AP-16 at the time of the April 10, 1987 event did not provide adequate information to operators in the event of a loss of residual heat removal cooling during mid-loop operation.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

As described in PGandE Letter DCL-87-099, dated May 4, 1987, an On-The-Spot-Change was made to OP AP-16 on April 12, 1987, to include a specific section on system malfunction or interruption of RHR during mid-loop operation.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

PGandE believes the changes already incorporated into OP AP-16 are sufficient to preclude recurrence.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE is presently in full compliance.

E. STATEMENT OF VIOLATION

Technical Specification 6.8.1.a requires that written procedures shall be established, implemented and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33. Appendix A of Regulatory Guide 1.33 specifies that procedures are required for the control of measuring and test equipment.

ANSI N18.7 - 1976/ANS-3.2 is approved by the NRC Staff as an acceptable method of operation under Regulatory Guide 1.33. Paragraph 5.3 of ANSI N18.7 states that activities affecting safety shall be described by written procedures and shall be accomplished in accordance with those procedures. These procedures shall provide an approved and preplanned method of conducting operations.

Contrary to the above, sometime between the loss of RHR on April 10 and the AIT examination of the temporary reactor vessel refueling level instrumentation system on April 16, 1987, operations personnel installed a scale next to the tygon tube indicating reactor vessel water level. The scale installation was not controlled by procedure and incorrectly indicated level height from that actually on the tygon tube by approximately 1 1/2 inches.

This is a Severity Level IV Violation (Supplement 1).

REASON FOR THE VIOLATION IF ADMITTED

PGandE acknowledges that the violation occurred as described in the Enforcement Action Letter and as further described in NUREG-1269. Upon completion of the temporary tygon tubing RVRLIS system, plant operators experienced some difficulty in accurately reading water levels due to the one foot increment marked on the tygon tubing.

In an effort to increase the accuracy of their readings, plant operators installed a scale with one inch increments adjacent to the tygon tubing. Measurements taken prior to removal of the operations scale indicate the markings on the tygon tube were 1 3/4 inches lower than the actual level and the operations scale was 3/4 inches lower than the actual level. Thus, readings using either the tygon tubing markings or the operations scale would have indicated a high reading.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

On April 20, 1987, the scale installed by operations personnel was removed and a new scale was installed by Instrumentation and Controls personnel in accordance with a design change notice and was inspected by QC personnel.

Plant operations personnel were cautioned against altering plant equipment, including temporary installations, without proper authorization.

OP A-2:II has been revised to add a prerequisite that the tygon tubing be installed, with a properly calibrated scale, prior to mid-loop operation.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

PGandE believes the corrective actions described above are sufficient to preclude recurrence.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

PGandE is presently in full compliance.