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PG&E Letter DCL-17-010

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-323, OL-DPR-82
Diablo Canyon Unit 2

Reply to a Notice of Violation; EA-16-168

References: 1. NRC Letter, "Diablo Canyon Power Plant - Final Significance Determination of a White Finding, Notice of Violation, and Follow-Up Assessment Letter; NRC Inspection Report 05000275/2016010 and 05000323/2016010," dated December 28, 2016 (EA-16-168) (ADAMS Accession No. ML16363A429)

Dear Commissioners and Staff:

Reference 1 provided a notice of violation involving a failure to provide adequate procedures for performing maintenance on safety-related equipment. Specifically, Procedure MP E-53.10R, "Augmented Stem Lubrication for Limitorque Operated Valves," Revision 4, used to perform maintenance on safety-related equipment, failed to provide instructions to establish and check that the travel of external switches installed on motor-operated valves are within vendor established criteria.

This letter provides Pacific Gas and Electric's (PG&E's) response to the violation as required by Reference 1. The enclosure to this letter discusses: (1) the violation; (2) the basis for disputing the violation's severity level; (3) the corrective steps that have been taken and the results achieved to date; (4) the corrective steps that will be taken; and (5) the date when full compliance was achieved.

In Reference 1, the NRC characterized the violation as a White Finding in accordance with the NRC's Enforcement Policy. PG&E does not dispute NRC's characterization of this issue as a violation. As discussed in the enclosure, PG&E has taken appropriate steps to correct the procedure and to ensure that other valves were not similarly affected.

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this letter.



If you have any questions regarding this submittal, please contact Mr. Hossein Hamzehee at (805) 545-4720, or via email at hgh6@pge.com.

Sincerely,

A handwritten signature in blue ink that reads 'James M. Welsch'.

James M. Welsch
Vice President, Nuclear Generation

Enclosure

mem6/4539/50886801

cc/enc: Kriss M. Kennedy, NRC Region IV Regional Administrator
Christopher W. Newport, NRC Senior Resident Inspector
Balwant K. Singal, NRC Senior Project Manager

Reply to Notice of Violation; EA-16-168

I. VIOLATION:

The NRC's Notice of Violation (Reference 1) states the following:

"Technical Specification 5.4.1.a, "Procedures," requires, 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. Section 9.a of Appendix A of Regulatory Guide 1.33, Revision 2, requires in part, that maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Contrary to the above, on December 5, 2011, the licensee failed to establish written procedures for performing maintenance on safety-related equipment, which were appropriate to the circumstances. Specifically, Procedure MP E-53.10R, "Augmented Stem Lubrication for Limitorque Operated Valves," Revision 4, used to perform maintenance on safety-related equipment, failed to provide instructions to establish and check that the travel of external switches installed on motor-operated valves are within vendor established criteria. Consequently, the limit switch for Valve RHR-2-8700B was installed, such that, it was operated repeatedly beyond over travel tolerances resulting in its failure on May 16, 2016. As a consequence of this inadequate maintenance procedure issue, the licensee also violated Unit 2 Technical Specification 3.5.2, "ECCS - Operating," because train B of the emergency core cooling system was determined to be inoperable for greater than the technical specification allowed outage time of 14 days."

II. REASON FOR THE VIOLATION, OR, IF CONTESTED, THE BASIS FOR DISPUTING THE VIOLATION OR SEVERITY LEVEL

PG&E is currently conducting a root cause evaluation (RCE) of the failure to provide adequate maintenance instructions in Procedure MP E-53.10R to establish and check that the travel of external switches installed on motor-operated valves are within vendor-established criteria. Preliminary conclusions of the RCE are that: (1) the Diablo Canyon Power Plant (DCPP) motor-operated valve (MOV) test program did not establish specific criteria for testing and inspection of the external limit switch to ensure limit switch over-travel parameters are within specific limits; and (2) a technical basis to support maintenance verification testing for external limit switches was not developed. The RCE is expected to be completed by March 1, 2017.

PG&E does not dispute the NRC's characterization of the failure to provide adequate maintenance instructions as a violation. However, PG&E believes that the final significance determination did not reflect the use of the best available information and applicable NRC processes and guidance. As a result, PG&E has submitted an appeal of the final significance determination (Reference 2 of this enclosure). For the reasons documented in Reference 2, the inspection finding associated with the notice of violation should be characterized as having very low safety significance (i.e., Green). Therefore, the notice of violation should not be considered an escalated enforcement action.

III. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

On May 16, 2016, during refueling outage 2R19, plant staff was performing Procedure PEP V-7B, "Test of ECCS Valve Interlocks." Valve SI-2-8982B failed to open on demand with the appropriate valve alignment configuration. The failure was documented in the Corrective Action Program (CAP).

On May 17, 2016, the NRC Resident was notified of the failure and the ongoing investigation surrounding the inability to open Valve SI-2-8982B. Valve RHR-2-8700B was subsequently repaired and the limit switch was replaced. Following the repairs, post-maintenance testing was successfully completed to verify proper operation of the valve and its external switch. The valve and limit switch were returned to service on May 18, 2016.

An extent of condition evaluation was completed, which identified a list of MOVs with similar external limit switches. In addition, a walkdown was performed on June 1, 2016. This walkdown concentrated on those configurations where a failure of the switch would not be detected by control room operators. The walkdown verified that no similar failures existed within DCCP.

On January 18, 2017, MP E-53.10R was revised (Revision 8) to provide instructions for standardized assembly, configuration, and adjustment of external limit switches. The revised procedure addresses the potential over-travel concern by directing maintenance personnel to ensure rotation is within specific limits.

Furthermore, as part of the extent of condition evaluation, the following procedure changes have been implemented:

- Procedure MP E-53.10A1, "Low Impact External Inspections of Limitorque Motor Operators," Revision 2, was made effective on November 21, 2016. This procedure was revised to provide directions for inspection of the external limit switch configuration against a set of standardized criteria.

- Procedure MP E-53.10A "Preventive Maintenance of Limitorque Motor Operators," Revision 39, was made effective on December 12, 2016. This procedure was revised to provide directions for inspection of the external limit switch configuration against a set of standardized criteria.
- Procedure AWP E-027, "Motor Operated Valve Sizing, Switch Setpoint Determination and Test Evaluation," Revision 3, was made effective on December 13, 2016. This procedure was revised to clarify the requirement to collect data on MOV-mounted external limit switches.
- Procedure MP E-53.10V1, "MOV Diagnostic Testing," Revision 16, was made effective on December 14, 2016. This procedure was revised to provide specific instructions for installation of monitoring devices on external limit switches to ensure rotation is within specific limits.

IV. CORRECTIVE STEPS THAT WILL BE TAKEN

In addition to the procedure changes described above, the procedure changes listed below are expected to be implemented by April 10, 2017. These procedures will be revised to provide detailed instructions for setting up external limit switches and/or inspection of external limit switch configuration against a set of standardized criteria, as appropriate.

- Procedure MP E-53.10S, "Limitorque Swap-Out and Switch Settings"
- Procedure PEP V-7B, "Test of ECCS Valve Interlocks"
- Procedure STP V-2D2A, "Exercising and Position Verification of Valve 8700A"
- Procedure STP V-2D2B, "Exercising and Position Verification of Valve 8700B"
- Procedure STP V-2B2, "Exercising and Position Verification of Valves 9003A and 9003B"
- Procedure STP V-2V1, "Exercising and Position Verification of Valves 8804A and 8804B"
- Procedure STP V-2O6, "Exercising and Position Verification of Valves 8982A and 8982B"

It should be noted that Procedures MP E-53.10S and PEP V-7B have been placed on administrative hold and cannot be used for work until revised.

For the remaining procedures, until the procedure revisions have been implemented, administrative controls have been established to require local

visual observation of the limit switches for over-travel when these procedures are performed.

Upon completion of the RCE, any additional identified corrective actions to prevent recurrence will be implemented in a timely manner and in accordance with the DCPD CAP.

V. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Procedure MP-E-53.10R was restored to full compliance with the requirements of TS 5.4.1.a on January 18, 2017, when the procedure was revised to provide instructions for standardized assembly, configuration, and adjustment of external limit switches.

VI. REFERENCES

1. NRC Letter, "Diablo Canyon Power Plant - Final Significance Determination of a White Finding, Notice of Violation, and Follow-Up Assessment Letter; NRC Inspection Report 05000275/2016010 and 05000323/2016010," dated December 28, 2016 (EA-16-168) (ADAMS Accession No. ML16363A429).
2. PG&E Letter DCL-17-009, "Appeal of Final Significance Determination Process Finding," dated January 26, 2017.