JUN 2 8 1989

Docket No. 50-344

Portland General Electric Company
121 S. W. Salmon Street
Portland, Oregon 97204

Attention: Mr. David W. Cockfield
Vice President, Nuclear

Thank you for your letter dated June 23, 1989, in response to our Notice of Violation and Inspection Report No. 50-344/89-13, dated May 24, 1989, informing us of the steps you have taken to correct the items which we brought to your attention. Your corrective actions will be verified during a future inspection.

Your cooperation with us is appreciated.

Sincerely,

M. Mendonca, Acting Chief
Reactor Projects Branch

bcc w/copy of letter dated 6/23/89:
docket file
State of Oregon
A. Johnson
G. Cook
B. Faulkenberry
J. Martin
Resident Inspector
Project Inspector
J. Zollicoffer
M. Smith

REGION V
MMendonca ~~RZimmerman~~
6/28/89 ~~6/ /89~~

REQUEST COPY] REQUEST COPY]
YES / NO] YES / NO]

SEND TO PDR]
YES / NO]

IE01

Portland General Electric Company

David W. Cockfield Vice President, Nuclear

June 23, 1989

Trojan Nuclear Plant
Docket 50-344
License NPF-1

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC 20555

Dear Sir:

Reply to Notice of Violation

Your letter of May 24, 1989 transmitted a Notice of Violation based upon Nuclear Regulatory Commission Inspection Report 50-344/89-13, Appendix A. Our reply to the Notice of Violation is provided in Attachment 1 to this letter.

Sincerely,

c: Mr. John B. Martin
Regional Administrator, Region V
U.S. Nuclear Regulatory Commission

Mr. William T. Dixon
State of Oregon
Department of Energy

Mr. R. C. Barr
NRC Resident Inspector
Trojan Nuclear Plant

121 S.W. Salmon Street, Portland, Oregon 97204, 503/464-8897

Response to Notice of Violation

Violation A

Title 10, Code of Federal Regulations, Part 50, Appendix B, Criterion XI, "Test Control", states in part: "A test program shall be established to assure that all testing required to demonstrate that systems and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents".

Contrary to the above, Temporary Plant Test (TPT)-235, "Remote Shutdown Station Input/Output Verification", dated April 25, 1988, did not contain sufficient testing to verify the interlocks and permissives associated with MO-8702, Residual Heat Removal System suction isolation valve, functioned as designed subsequent to modification. Specifically, TPT stated in part, "verify circuits interrupted by the Remote Shutdown Station (RSS) installation will perform their control, indication, permissive and/or protective functions after restoration". However, testing performed on May 22, 1988 did not verify the permissive and interlock features of MO-8702 and subsequently, on April 9, 1989, the permissive and interlock features of MO-8702 were found to be inoperable.

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

Response

Portland General Electric (PGE) acknowledges the violation.

1. Reason for the violation.

   The reason for the violation was personnel error in determining the retest requirements for the Temporary Plant Test (TPT) associated with the instrument loops for MO-8702. During original construction a polarity error in the cable plug to Modules PB-405A/B was corrected by reversing the wiring at the module terminal strip instead of at the module connector. When Request for Design Change (RDC) 85-052 (Remote Shutdown Station Installation) required the rewiring of the as-designed module terminal strip, a reversal of the polarity at the input to the module resulted. Post modification testing should have discovered this polarity error but it did not. It was assumed by the engineer preparing the test that the bistable and controller functions for MO-8702 were not affected by the rewiring modification to the new Remote Shutdown Station. This assumption resulted in the Hagan Rack control, interlock, alarm outputs, and some indications not being fully tested. The retest requirements set forth in the TPT only verified the operability of the indications on the control room Hagan Racks.

2. Corrective steps that have been taken and the results achieved.

   a. The ability of MO-8702 to be opened and shut from the control room was verified. The valve was left in the normal locked-open position to support Mode 5 (cold shutdown) operation. Additionally, automatic isolation capability was confirmed for MO-8701, the valve which provides a redundant isolation function to MO-8702.

   b. The input module PB-405A/B, to MO-8702, has been rewired to correct the original polarity error.

   c. Nuclear Plant Engineering (NPE) has reviewed all of the Hagan Rack circuitry modified by the RDC 85-052 (Remote Shutdown System) installation. The review determined that all instrument and control loops affected by RDC 85-052 have been satisfactorily tested or otherwise verified to be operating correctly. Plant System Engineering (PSE) has performed an independent review of the conclusions reached by NPE and concurs with NPE's findings.

   d. Plant System Engineering Procedure (PSEP) 20-7 has been revised to require that the system engineer and design engineer concur with post-design change test requirements and results. This practice has been adopted for all design changes completed during the 1989 Refueling Outage.

   e. The Event Report (89-40) associated with the violation has been reviewed and discussed at NPE/PSE Electrical Group meetings as a lessons learned item. Ensuring that adequate retest requirements are specified for all components affected by an RDC was emphasized.

3. Corrective steps that will be taken to avoid further violations.

   a. The Periodic Operating Test (POT-2-5-DB), which tests the interlocks for MO-8702, will be satisfactorily completed prior to entering Mode 4 (hot shutdown) following the current refueling and maintenance outage.

   b. The Quality Assurance Department will become more involved in post-installation testing. An audit of Plant Systems Engineering (PSE) in July 1989 will include a review of post-installation testing.

4. Date when full compliance will be achieved.

   Full compliance has been achieved.

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