PHILADELPHIA ELECTRIC COMPANY 2301 MARKET STREET P.O. BOX 8699 PHILADELPHIA, PA. 19101 (215) 841-5001 JOSEPH W. GALLAGHER VICE PRESIDENT November 9, 1987 NUCLEAR OPERATIONS Docket Nos. 50-352 Mr. Robert M. Gallo Chief Projects Branch No. 2 Division of Reactor Projects Region I U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555 SUBJECT: Response to Inspection Report No. 50-352/87-19 Dear Mr. Gallo: Your letter dated October 9, 1987 forwarded Inspection Report No. 50-352/87-19 for Limerick Generating Station. Appendix A of the letter addressed an item which does not appear to be in full compliance with Nuclear Regulatory Commission requirements. Section 2.2 of the letter addressed four weaknesses found in current plant programs and activities. The Violation and weaknesses are restated below, followed by our response. Restatement of Violation 10 CFR 50, Appendix B, Criterion VI, requires controls to be established in the issuance of documents, such as instructions,

procedures, and drawings, including changes which prescribe all activities affecting quality. Also required are measures to assure that documents, including changes, are reviewed for adequacy.

1. Administrative Procedure A-6 provides measures for the control of drawings as used by the plant staff. Step 5.3, controlled drawings, requires that the Modification Coordinator control and maintain in an "as-built" condition Category I drawings for Unit

Contrary to the above, on August 20, 1987, electrical drawing E-15, Single Line Meter and Relay Diagram - 4 KV Safeguard Power was

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- not maintained in an as-built condition in the control room and maintenance request coordinator office.
- 2. Administrative Procedure A-14, "Procedure for Control of Plant Modification," step 5.5.8 and Appendix 7 requires that the Modification Coordinator or his designee prepare a list of Category I drawings which are required to be "red lined" to reflect the changes implemented by the plant modification.

Contrary to the above, it was discovered that the as-built Drawing Update Form (A-14, Appendix 7) did not reflect drawing E-15 as a Category I drawing requiring red lining due to plant modification 84-0026. Therefore, the applicable copies of the E-15 drawings were not updated at the Category I drawing locations as defined in Administrative Procedure A-6. This is a Severity Level IV violation (Supplement 1).

Admission of Alleged Violation:

Philadelphia Electric Company acknowledges the violation as stated.

Reason for the Violation:

The reason for the incidents was personnel error in that the responsible individuals did not perform their work in accordance with established procedural requirements.

The incident where in Electrical drawing E-15 (Single Line Meter and Relay Diagram-4kV Safeguard Power) was not maintained in the as-built condition in the control room and maintenance request coordinator's office occurred because Modification Group personnel failed to remove the superseded revision of the drawing from these locations following insertion of the latest revision.

The incident where in the As-Built Drawing Update Form for Modification 84-0026 did not reflect drawing E-15 as a Category I drawing requiring redlining occurred because plant personnel did not utilize the proper reference list which identifies those design change documents requiring the redlining process. As a result, copies of the E-15 drawings were not updated at the Category I drawing locations.

Significance of Violation:

Modification 87-0026 concerned the addition of an emergency feature to the 'B' Residual Heat Removal Service Water (RHRSW) pump at its pump motor circuit breaker cubicle, to provide local control. This feature

fulfills the requirements for redundant remote shutdown capability without the need to install temporary jumpers or lift leads. The severity of the violation is reduced in that although drawing E-15 had not been revised to show the change, plant operators had been made aware of the availability of the switch through a Modification Training Bulletin describing the changes, issued July 14, 1987.

Corrective Action Taken and Results Achieved:

On August 20, 1987, the superseded revision of E-15 was removed from the control room and maintenance request coordinator's office. On August 21, 1987, the As-Built Drawing Update Form was revised to include IDCN-006 of drawing E-15, the redlining was accomplished, and the drawings were distributed to Category I locations. In addition all Category I drawings affected by plant modifications made since the modification audit on April 29, 1987, have been reviewed for completeness, and the drawings located in the Category I drawing areas have been verified to be the proper revision. As a result, full compliance with administrative and NRC requirements was achieved on August 21, 1987.

Corrective Actions to be Taken to Avoid Future Non-Compliance:

The Modification Coordinator discussed the incident with the responsible involved personnel who have also been subject to disciplinary measures in accordance with Company policy. Additionally, a meeting was held with members of the Modification Group, stressing the significance of following procedures for all drawings requiring redlining, as well as ensuring that Category I drawing locations contain only the latest revisions reflecting the current "as-built" configuration. Bi-weekly audits to ensure that only the current revision of drawings are located at Category I drawing areas have also been initiated.

The Modification Coordinator or designee will review design change documents with the affected drawings to ensure that all those documents requiring redlining are identified on the As-Built Drawing Update Form. Previously, the Modification Coordinator or designee reviewed the Drawing Update Form for completeness, but did not compare it with the drawings designated.

In addition, an independent review of the redlining process will be performed by a member of the Modification Group to verify incorporation of these changes on Category I original drawing. Administrative Procedure A-14 Appendix 7 will be revised to implement these items.

Date When Full Compliance Was Achieved:

Full compliance was achieved on August 21, 1987, when all Category I drawing locations were updated with the proper revision of drawing E-15.

Licensee Weakness:

(1) The liberal use of the Temporary Circuit Alteration (TCA) process has resulted in minor plant modifications being accomplished and remaining in effect for extended periods of time without having received the same rigorous reviews and controls required of a permanent plant modification. Also, 10 CFR 50.59 safety evaluations in some instances appeared to lack the detail of analysis warranted prior to temporarily modifying a plant system.

Response:

Currently installed TCA's had been reviewed to determine the appropriate close-out mechanism for each. The TCA's have been prioritized and a close-out schedule is being implemented. An Engineering Safety Evaluation wil be written in accordance with Administrative Procedure A-5 (Procedure for Safety Evaluations) for each Q-listed TCA currently installed. A formal periodic review program will be developed and the appropriate procedures will be revised to ensure timely removal of all future Temporary Circuit Alterations.

Licensee Weakness:

(2) The procedures for the erection of temporary scaffolding in the plant does not fully address the potential affects on the operation of safety related equipment.

Response:

Administrative procedure A-30.1 (Control of Plant Scaffolds and Work Structures) has been revised to include additional location, dimension and structural support requirements for structures constructed in safety related areas. The revised procedure also instructs plant staff personnel to inspect the structures installed in safety related areas to ensure proper compliance with the procedure. The individual performing the inspection will be required to complete a signature line on the revised Scaffold Authorization Tag as documentation. This revision is expected to be in effect by November 11, 1987.

Licensee Weakness:

(3) Licensed operator training on various plant modifications appeared to warrant more specific details on the effect of the modification on plant system operation. There did not appear to be specific controls established which would ensure operators receive modification training in a timely manner.

Response:

On October 20, 1987, the quality of the content of our Modification Training Bulletins was discussed with the Performance group who is responsible for the majority of modification review. A revision of Administrative Procedure A-14, Appendix 3 (Instructions for the Mod Training Bulletin) was initiated on 11/1/87 to provide more concise instruction for the completion of Modification Training Bulletins, emphasizing attention to detail. This revision will be distributed to all System Engineers, for their reference in producing Modification Training Bulletins.

Administrative Procedure A-14 (Procedure for Control of Plant Modifications) will also be revised to include a formal mechanism for the Operations Group to determine which Modification Training Bulletins merit immediate on-shift training when the modification is implemented. Furthermore, Administrative Procedure A-7 (Shift Operations) will also be revised to include implementation steps and documentation for on-shift modification training.

These changes will ensure that complete Modification Training Bulletins are written with sufficient detail and that operators have received immediate modification training. These actions are expected to be completed by January 1988.

Licensee Weakness

(4) Involvement by the Quality Assurance (QA) department and Independent Safety Engineering Group (ISEG) in plant restart readiness determinations was not apparent.

Response:

A QA Division signoff was added to LGS General Procedure, GP2, App. I (Reactor Start-Up and Heat-Up), and signed by the Limerick Generating Station QA Site Supervisor. The QA Division was also represented at the OPCON Change PORC Meeting held on August 26, 1987. Quality Assurance Department Procedure, QADP-34, (Review of PECo QA/QC Open Quality Items That May Affect Startup) will be revised to require "open QA items which are required to be completed prior to startup" to be provided to PORC, and a followup letter to be sent to PORC when open QA items are completed satisfactorily.

Independent Safety Evaluation Group (ISEG) Open Items will be evaluated during the OPCON Change PORC meetings. In addition, ISEG will revise Nuclear Safety Section Procedure I-2 (Procedure for Review of Plant Operations, Maintenance and Surveillance Activities) to add a similar requirement.

All procedure revisions are expected to be in effect by December 31, 1987.

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

Attachments

cc: Addressee

W. T. Russell, Administrator, Region I, USNRC E. M. Kelly, Senior Resident Site Inspector