

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-440/87015(DRS)

Docket No. 50-440

License No. NPF-58

Licensee: Cleveland Electric Illuminating Company  
Post Office Box 5000  
Cleveland, OH 44101

Facility Name: Perry Nuclear Power Plants, Units 1 and 2

Inspection At: Perry Site, Perry, Ohio

Inspection Conducted: June 29-July 1 and August 24-28, 1987

Inspectors: *F. J. Jablonski for*  
N. C. Choules

9-15-87  
Date

*F. J. Jablonski for*  
T. H. Carter

9-15-87  
Date

Approved By: *Frank J. Jablonski*  
Frank J. Jablonski, Chief  
Quality Assurance Programs  
Section

9-15-87  
Date

Inspection Summary

Inspection on June 29-July 1 and August 24-28, 1987 (Report No. 50-440/87015(DRS))

Areas Inspected: Routine safety inspection of a previously identified finding; annual review of the QA program including audits, and maintenance in accordance with selected sections of Inspection Modules 92702, 35701, 40702, 40704, 62700, and 62702.

Results: One violation was identified in one of two areas inspected (failure to update a vendor manual, Paragraph 2.b(4)).

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## DETAILS

### 1. Persons Contacted

#### Cleveland Electric Illuminating Company (CEI)

- +T. Boss, Supervisor, OQS/NQAD
- +\*W. Coleman, General Supervising Engineer, OQS/HQAD
- \*R. DeVries, I&C Lead Planner
- +\*B. Ferrell, Operations Engineer, L&CS/PPTD
- \*G. Garcia, Maintenance Planner
- +J. Hayes, Lead Quality Engineer
- \*D. Meinke, Lead I&C Supervisor
- +E. Riley, Manager, NQAD
- \*C. Shuster, Manager, NED
- \*D. Takacs, General Supervisor, Maintenance
- \*L. Teichman, Supervisor, Maintenance Planning

\*Denotes those attending the exit meeting on August 28, 1987.

+Denotes those attending the exit meeting on July 1, 1987.

Other licensee personnel were contacted as a matter of routine during the inspection.

### 2. Licensee Action on a Previous Inspection Finding

- a. (Closed) Violation (440/85014-03B): Limited shelf life items were not identified. The licensee informed the inspectors in response letter dated May 17, 1985, that stock items with limited shelf life had been identified and marked with shelf life data. The inspectors verified through review of selected stock items that the items had been marked with shelf life data. This item is closed.

### 3. QA Program Review

The purpose of this inspection was to evaluate implementation of the licensee's QA program in the areas of audits and maintenance. The inspection was performed by reviewing procedures, records, audit reports and conducting interviews. In addition, training and qualifications of auditors and maintenance personnel were reviewed.

#### a. Auditing

This portion of the inspection was performed to determine if the site auditing program conformed to regulatory requirements, commitments and industry standards. The inspectors reviewed the licensee audit plan, and selected audits and surveillances in the areas of maintenance and procurement; including but not limited to PIOs 86-08, 86-20, 87-02 and 87-11. The following information was obtained:



- The auditors were certified in accordance with the licensee's existing program that met the requirements of ANSI N45.2.23.
- An audit surveillance plan and schedule was prepared and approved. The proposed audits covered the areas required by the Technical Specifications.
- Audit reports were well written, documenting the areas reviewed and the findings and concerns identified.
- Audit findings and concerns were promptly handled, with good and timely closure.
- Audits were conducted in accordance with the approved schedule.
- There was an extensive use of on-the-job surveillance of maintenance activities by Quality Assurance Auditors. These surveillances were in addition to the witnessing of hold points and observation of maintenance activities by QC personnel.
- A training program for auditors had been established and implemented. The program included continuing training for qualified auditors.

No violations were identified.

b. Maintenance

The inspectors reviewed twenty corrective maintenance work orders (WOs) that were completed within the last three months. The WOs were reviewed to determine if adequate work instructions were provided, QC hold points were included as applicable, spare parts used were traceable to purchase orders, testing and retest requirements were required and performed, and documentation of conditions found and work performed was adequate. The work order prioritization system for work orders and the work order backlog was reviewed. From these and other reviews the following observations and finding were made.

- (1) In general, the work orders contained good, detailed instructions for the crafts to perform work.
- (2) Testing and retesting requirements were specified on the work orders.
- (3) The documentation and traceability of spare parts used were very good. The inspectors traced two spare parts back to the original purchase order and verified that the parts were procured from qualified vendors.

- (4) The inspectors reviewed Work Order 860013143 that provided instructions for rebuilding a damper actuator in the Annulus Exhaust Gas Treatment System. When the system was rebuilt, the actuator would not work and two electrical leads had to be reversed. The actuator was initially wired the same way as the original installation. When the actuator did not work, design engineering was contacted and an Field Change Request (FCR) 04492 dated July 15, 1986, was provided which indicated that the vendor color coding of wires was not always consistent. This FCR was for an actuator of the same type which was rebuilt earlier. Based on this FCR, the wires were reversed and the drawing for the actuator revised. The inspector noted that the corrective action for FCR 04492, dated September 15, 1986, indicated that the Vendor Manual, ITT M-NH90 Model B, would be revised to address the color coding problem. The vendor manual had not been updated by August 25, 1987. Section 6.2 of the licensee Procedure POP 0602, "Vendor Information Control Program," required the design engineer to process identified changes to vendor manuals. The failure to revise the ITT vendor manual as required by Procedure POP 602 is a violation of 10 CFR 50, Appendix B, Criterion V. (440/87015-01)

Prior to the end of the inspection the licensee processed a change to the ITT vendor manual to address the color coding of wires problem. Personnel were also instructed on the requirements to update vendor manuals. Since corrective action for this violation has been completed, no response to this violation is required.

- (5) The inspectors noted in the write-ups of work performed for WOs 870006653 and 870006384 that potential problems were identified, but no corrective actions for the concerns were documented in the WOs packages. For WO 870006653, a technician identified that a fuse blew during testing and for WO 870006384, a technician indicated that a drawing and vendor manual were incorrect. The inspectors verified that proper corrective actions had been taken for these concerns. Assuring that corrective actions for concerns are documented or referenced in WO packages was discussed with licensee personnel who agreed to consider the inspector's comments.
- (6) The inspectors noted that documentation of as-found conditions and work performed for WOs was minimal for a lot of the WOs. Improvement could be made in this area. An interview with the Maintenance Supervisor indicated the licensee was already aware of this concern and was taking action to improve the documentation of as-found conditions and work performed.
- (7) The inspector determined that it was not always possible to identify who performed the work for a work order because of extensive use of initials without translation of those initials. Required sign offs for action steps in maintenance and I&C WO



packages was inconsistent. Improvement in these areas of concern was discussed with licensee personnel who agreed to consider the inspector's comments.

- (8) The inspector reviewed the training program for Maintenance planners and crafts, and I&C planners and technicians. Some training had taken place. The licensee has plans to have INPO accreditation of the Maintenance and I&C training programs by April 1988. It appeared to the inspectors that past training had been marginal but plans were in place to improve it.
- (9) The licensee has slowly reduced the WO backlog. On August 17, 1987, the corrective maintenance backlog, not including refueling outage WOs, was 1176. The licensee has an established priority system from 1-5 for WOs. Priority 1 is an emergency. Priority 2 is urgent and repair should be made within 48 hours. Priority 3 is normal and repair should be made within one week. Priority 4 is routine and repair is desirable, but deferrable. Priority 5 requires an outage. Of the 1176 backlog MWOs, 35 were Priority 2, 603 were Priority 3, and 538 were Priority 4. The licensee has established a work review committee to review the prioritization of WOs. The priority system appeared to be effective.

One violation was identified.

c. Conclusion

- In general, WO travelers contained good detailed instructions and the backlog of WOs was reduced by use of an effective priority system.
- Training of auditors and maintenance personnel was adequate although plans were in place to improve maintenance personnel training and continuing training for qualified auditors.
- The auditing program was effective: auditors were certified, audit reports were well written in a timely manner, and on-the-job surveillances were performed.
- Procurement documentation and traceability of spare parts were very good. Shelf life expiration dates were assigned to parts in the warehouse when applicable.

4. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on July 1, 1987, and August 28, 1987. The inspectors summarized the purpose and findings of the inspection. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed during the inspection. The licensee did not identify any such documents/processes as proprietary.