

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-373/85039(DRS); 50-374/85040(DRS)

Docket Nos. 50-373; 50-374

License No. NPF-11; NPF-18

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: LaSalle County Station, Units 1 and 2

Inspection At: LaSalle Site, Marseilles, IL

Inspection Conducted: November 20, 21 and December 20, 1985

Inspectors: R. Mendez

R. Mendez

Z. Falevits

Z. Falevits

1/10/86

Date

1/10/85

Date

Approved By: C. C. Williams, Chief
Plant Systems Section

C. C. Williams

1/10/86

Date

Inspection Summary

Inspection on November 20 through December 20, 1985 (Reports No. 50-373/85039(DRS); 50-374/85040(DRS))

Areas Inspected: Routine unannounced inspection of the licensee's inspection program motor for operator valve limit switch compartment wiring. The inspection involved a total of 32 inspector-hours by two NRC inspectors.

Results: One violation was identified (two examples of failure to follow procedures Paragraphs 2.a.(1) and 2.a.(2)).

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

- +R. Bishop, Station Superintendent
- *H. Mulderink, Master Electrician
- *C. Sargent, Assistant Superintendent - Operations
- *D. Petersen, Staff
- *J. Spengler, Staff Assistant - Electrical Maintenance
- *P. Manning, Technical Staff Supervisor
- *B. Sheldon, Assistant Superintendent - Maintenance

The inspector also contacted and interviewed other licensee personnel during this inspection.

*Denotes those personnel attending the November 21, 1985 interim exit interview.

+Denotes those personnel who were present during the telecon exit briefing on December 20, 1985.

2. Review of Licensee's Inspection Program of Motor Operated Valve Internals

- a. The inspectors reviewed the inspection program initiated by the licensee to identify and replace unqualified or unidentified internal wiring inside safety-related motor operated valve (MOV) and limit switch compartments. The NRC review was conducted to ascertain whether generic Work Request (WR) L52489 had been implemented and whether it addressed program requirements. The review indicated that various deficiencies including broken lugs, cracked rotors, loose connections, missing washers as well as unqualified or unidentified internal conductors were identified by the licensee during the inspection of the MOV limit switch compartments. In addition, torque switch settings were recorded by the licensee as requested by the NRC during a previous inspection. As of November 22, 1985, 72 valves had been examined by the licensee. Of those inspected twenty settings on 17 valves were found to be different from the vendor or the CECo Station Nuclear Engineering Department specified settings. (This was previously identified as a violation in Inspection Report 373/85034; 374/85035).

- (1) The inspectors reviewed generic work request WRL25489 as associated with the licensee's inspection on MOV's 2E12-F009, 2E32-F001A, 1E12-F004C, 2E21-F005, 2E21-F001, 2E12-F053B, 2E51-F008, 2E51-F063, 2E51-F091, 2E12-F004B, 2B21-F067C, and 2VP-F053A.

The review of the work requests and associated work travelers indicated incomplete documentation of the work activities

verified; for example, the Maintenance/Modification Procedure for LaSalle generic Work Request (WR) 52489, states in part, "Describe work to be performed, and identify by revision and or date, the applicable procedures/drawings/traveler. . .to be used, complete all documentation requirements requested by this Work Request." Inspections by the licensee of the internal wiring inside approximately 70 MOV's limit switch compartments were performed. However, the inspection records for the valves that were inspected failed to reference a schematic or connection diagram and revision or date.

- (2) The inspectors examined the latest applicable schematic and connection diagrams pertaining to the valves tested in (1) above and compared the drawings against the traveler inspection checklist to determine the effectiveness of the licensee's program to identify and replace the unqualified jumpers. CECo inspectors were required to verify and document as acceptable or not acceptable all jumpers shown on schematic and connection diagrams. During this examination, the inspectors determined that certain jumpers were identified on the latest design drawings were noted by CECo inspectors on the Work Request as not applicable (N/A) or were not documented. The following discrepancies between the design drawings and the Work Request inspection data were noted by the NRC inspectors:

<u>Valve No.</u>	<u>Deficiency</u>
2E12-F004C	Jumper from limit switch point 7 to point 17 as shown on schematic diagram 1E-2-4220AX and on wiring diagram 1E-2-4392AA was noted as N/A.
2E21-F005	Jumper from limit switch point 13 to 17 as shown on schematic diagram 1E-2-4221AB and on wiring diagram 1E-2-4389AD was noted as N/A.
2E12-F053B	Jumper from limit switch point 7 to point 13 as shown on schematic diagram 1E-2-4220BZ and wiring diagram 1E-2-4389AD was noted as N/A.
2E51-F008	Jumper from limit switch point 8 to point 16 as shown on schematic diagram 1E-2-4226AN and wiring diagram 1E-2-4387AB was noted as N/A.
2E12-F004B	The jumper from point 17 to 7 was not documented as being verified, on the station traveler, although, connection diagram 1E-2-4391AA and schematic diagram 1E-2-4220AZ indicated a jumper between the two points.
2B21-F067C	The jumper from point 17 to 4 was marked N/A, although schematic diagram 4203AL and connection diagrams 1E-2-4387AE show this jumper. Also points

4 to 7 were verified by the CECO inspector as being jumpered, although the above diagrams do not indicate a jumper for those points.

2VP-F053A Connection diagram 1E-2-4387AF and schematic diagram 1E-2-4081AE show the limit switch connections on points 1 to 17 and 1C to 17C, however, this was not documented on the station traveler.

The inspectors expressed their concern to the licensee that either the above mentioned jumpers were mistakenly omitted during the inspections, or that they do not exist in the field and were therefore in conflict with the requirements of the design drawings. The licensee indicated that all WR's associated with this program will be reviewed and jumpers omitted during the original inspection will be reinspected. The inspectors informed the licensee that the issues described above in 2.a.(1) and 2.a.(2) were two examples of a violation with Criterion V of 10 CFR 50, Appendix B, failure to follow procedures and instructions to establish documented evidence of activities affecting quality. (50-373/85039-01; 50-374/85040-01).

- b. The inspectors selected several completed WR packages and reviewed licensee's actions to disposition identified deviations.

A review of WR L52489, dated October 31, 1985, associated with High Pressure Core Spray (HPCS) Pump Discharge Valve 2E22-F004 indicated that various as-built discrepancies exist between schematic diagram 1E-2-4222AD Revision "H", connection diagram 1E-2-4415AG, Revision "E", and the field as-built configuration.

The licensee subsequently issued Drawing Change Request (DCR) 85-219, dated November 19, 1985, which addressed discrepancies in rotor No. 3 limit switch wire designations which were found to be different from the field as-built designations. Also, Deviation Report DVR-1-2-85-124B, dated October 31, 1985, documented a loose connection (two full turns) found on the close torque switch terminal No. 17. The inspectors reviewed the licensee's dispositioning of the WR associated with valve 2E22-F004. The review and field inspection of the valve by the inspectors indicated that additional as-built discrepancies were noted on the WR; for example, limit switch and valve terminal numbers that were not in accordance with the applicable schematic and connection diagrams were identified. Additionally, a conductor noted as "red" on the connection diagram was shown as "black" on the WR indicating that a black conductor was installed. No change documents were available for review during this inspection which would have dispositioned the above discrepancies. Pending further review this issue is considered unresolved (50-373/85039-02; 50-373/85040-02).

- c. Review of WR L52489, dated October 26, 1985, associated with Reactor Core Isolation Cooling (RCIC) Steam Supply Bypass to RHR Hx valve 2E51-F091 and delineated on schematic diagram 1E-2-4226AM, Revision P and connection diagram 1E-2-4387AA, Revision F; indicated that additional wiring existed in the field between the torque switches and the limit switches which did not appear on the schematic or connection diagram. In addition, the licensee replaced the jumper conductor between Rotor No. 1 point 3 and Torque switch No. 17 as required, however, this jumper was documented as N/A on the WR.

On December 2, 1985, the inspector requested the licensee submit a completed copy of the WR associated with valve 2E51-F091 for examination. It appears that Section EM9 of the WR had been changed to reflect licensee corrective action taken to disposition the discrepancies identified during the October 29, 1985, inspection program. The inspector noted that these corrections had been signed by the Maintenance foreman after November 21, 1985, and backdated to October 30, 1985. The licensee was informed of the concern on December 10, 1985. Pending licensee response and NRC additional review this issue is considered unresolved (50-373/85039-03; 50-374/85040-03).

- d. The inspectors selected two valves that had been previously inspected and completed by the licensee. RHR containment spray outboard valve 2E12-F016B was inspected and observed to contain a nicked and unidentifiable conductor between limit switch points 4 and 8. At the inspectors request the valve was manually opened and closed. The inspectors noted that limit switch rotors 2 and 4 changed position 10 hand wheel turns from valve fully closed position, while rotor No. 1 changed position 8 hand wheel turns from the valve fully open position and rotor No. 3 changed position 12 turns from the fully open position. Under normal operation rotors 1 and 3 change positions at the same time due to the rotor contacts which are interlocks in other circuits. Section F6 of LaSalle "Limitorque Valve Post Maintenance Verification" Procedure LEP-GM-102, dated October 7, 1985, requires that for size "O" valves and larger, the rotor be set at 20 valve handwheel turns. The licensee could not explain why the rotors changed positions at different intervals. Pending review of procedures and instruction to determine if the above is acceptable, the item is unresolved (50-373/85039-04; 50-374/85040-04).

3. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of violations or deviations. Unresolved items disclosed during this inspection are discussed in Paragraphs 2.b, 2.c, and 2.d.

4. Exit Interview

The inspector met with representatives licensee (denoted in Paragraph 1) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspections noted in this report. The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspector during the inspection. The licensee did not identify any such documents/processes as proprietary.