



Commonwealth Edison  
LaSalle County Nuclear Station  
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April 4, 1994

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Document Control Desk

Subject: LaSalle County Station Units 1 and 2  
Supplemental Response to Notice of Violation  
Inspection Report Nos. 50-373/93035; 50-374/93035  
NRC Docket Numbers 50-373 and 50-374.

References: 1. E. G. Greenman letter to W. P. Murphy,  
Dated February 3, 1994, Transmitting  
NRC Inspection Report 50-373/93035; 50-374/93035.  
2. W. P. Murphy letter to U. S. NRC Document Control Desk,  
Dated April 1, 1994, Transmitting  
Response to Notice of Violation 50-373/93035-01.

Enclosed is Commonwealth Edison Company's supplemental response to the Notice of Violation (NOV) which was transmitted in the letter referenced in 1 above. Our initial response was transmitted to the NRC in the letter referenced in 2 above. LaSalle Technical Surveillance (LTS)-600-6 was referenced in the "Corrective Actions To Be Taken To Avoid Further Violations" section of Attachment A. Instead of LTS-600-6, the procedure numbers will be LTS-500-18 for Unit 1 and LTS-500-19 for Unit 2. The revised portion of Attachment A is indicated in the left-hand margin.

If there are any questions or comments concerning this letter, please refer them to me at (815) 357-6761, extension 3600.

Respectfully,

W. P. Murphy  
Site Vice President

LaSalle County Nuclear Station

cc: J. B. Martin, Regional Administrator, RIII  
A. T. Gody Jr., Project Manager, NRR  
D. Hills, Senior Resident Inspector, LaSalle  
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Station File

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ATTACHMENT A  
SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION  
NRC INSPECTION REPORT  
50-373/93035; 50-374/93035

**VIOLATION: 373(374)/93035-01**

During an NRC inspection conducted on November 25, 1993 through January 10, 1994, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR 50, Appendix B, Criterion V requires, in part, that activities affecting quality shall be prescribed by documented procedures of a type appropriate to the circumstances.

Contrary to the above, LaSalle Mechanical Procedure (LMP)-MS-06, "Installation of Main Steam Safety Relief Valves (SRV)" and LaSalle Electrical Procedure (LEP)-MS-101, "SRV Lift Indicating Switch Assembly Removal" (utilized for replacement of Unit 1 SRV "E" on January 29, 1993 and Unit 2 SRV "L" on April 11, 1992) were inappropriate to the circumstances in that they did not provide instructions sufficient to ensure correct tightening of SRV spindle nuts.

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

ATTACHMENT A (Continued)  
SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION  
NRC INSPECTION REPORT  
50-373/93035; 50-374/93035

**REASON FOR VIOLATION:**

We agree that LaSalle Mechanical Procedure (LMP)-MS-06, "Installation of Main Steam Safety Relief Valves (SRV)", and LaSalle Electrical Procedure (LEP)-MS-101, "SRV Lift Indicating Switch Assembly Removal", were not adequate to ensure proper SRV spindle nut installation. The procedure should have provided a method to verify that the spindle nut was properly installed. The inadequate procedures resulted in Unit 1 SRV "E" not completely opening during the September 14, 1993 Unit 1 Loss of Station Auxiliary Transformer event. This problem was identified during investigation of the SRV for a potential position indication problem. Additionally, testing of the Unit 2 SRV's during the Unit 2 1993 refuel outage identified that a similar problem existed on SRV "L".

The procedures did not contain extensive details on the proper installation of the spindle nuts. The instructions were that the spindle nut should be installed by rotating the spindle nut assembly down until it bottoms out. The vendor manual for the SRV's contained more explicit details for spindle nut installation. When the procedure was developed and approved, we believed that the information contained within the procedure was adequate to ensure proper spindle nut installation. Consequently, the vendor manual information was not included in the procedure. The procedural inadequacy created the potential for positioning the spindle nut short of the fully bottomed position. This condition cannot be easily identified by visual examination because of the valve design and no further method for verifying proper spindle nut installation was required by our procedures.

The root cause of the failure of these SRV's was determined through extensive testing which was developed by LaSalle engineering personnel. This was the first time this test methodology was utilized, which explains why the problem had not been identified previously.

**CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED:**

Upon identification of the root cause of the SRV "E" failure on Unit 1, personnel adjusted the spindle nut. SRV "E" was then retested and verified to be operating properly. The same testing was performed on all the Unit 1 and Unit 2 SRV's in an effort to identify any other spindle nuts that were not installed properly. This testing revealed that Unit 2 SRV's "L" and "G" did not have proper spindle nut installation. SRV "L" had been replaced on April 11, 1992. SRV "G" was replaced on December 16, 1993 subsequent to the loss of offsite power event.

The SRV "G" deficiency was a result of a decision to not immediately revise procedures following identification of the root cause of the SRV failures. This decision was made because the Unit 2 SRV work packages were already in the field for work during the ongoing refuel outage. We relied on post-maintenance testing to verify proper spindle nut installation. We agree with the inspector's conclusion

ATTACHMENT A (Continued)  
SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION  
NRC INSPECTION REPORT  
50-373/93035; 50-374/93035

that this method of control was weak. We have counselled personnel involved in the decision about this issue. The spindle nuts for SRV's "L" and "G" were adjusted and the SRV's were retested and verified to be operating properly.

**CORRECTIVE ACTIONS TO BE TAKEN TO AVOID FURTHER VIOLATIONS:**

1. LEP-MS-101 and LMP-MS-06 have been revised. The revisions include verification that the spindle nut is bottomed out against the load plate by attempting to pivot the load plate by hand, and a QC Hold Point for verification of proper spindle nut installation.
2. The testing that identified the root cause of the SRV failures was performed as a special test. This test is being formalized into permanent plant procedures, LaSalle Technical Surveillance (LTS)-500-18, for use on Unit 1 SRV's, and LTS-500-19, for use on Unit 2 SRV's. These procedures will be included in SRV post-maintenance testing requirements. LTS-500-18 will be completed by May 1, 1994 and will be utilized during the current Unit 1 refuel outage for SRV testing. LTS-500-19 will be completed by September 30, 1994 and will be utilized during the next Unit 2 refuel outage for SRV testing.

**DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:**

Full compliance was achieved on March 30, 1994 when LEP-MS-101 and LMP-MS-06 were revised with an enhanced method of SRV spindle nut installation.