

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No.: 50-373/88021(DRS); 50-374/88020(DRS)

Docket Nos.: 50-373; 50-374

Licenses No. NPF-11; NPF-18

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: LaSalle County Station, Units 1 and 2

Inspection At: Sargent and Lundy Engineers, Chicago, IL

Inspection Conducted: August 17-18, 1988

Inspector: *J. A. Gavula*
J. A. Gavula

8/31/88
Date

Approved By: *D. H. Danielson*
D. H. Danielson, Chief
Materials and Processes Section

8/31/88
Date

Inspection Summary

Inspection on August 17-18, 1988 (Reports No. 50-373/88021(DRS); 50-374/88020(DRS))

Areas Inspected: Special safety inspection of facility modifications associated with snubber reduction (37701), non-licensed staff training, and licensee action on previously identified problems (92701).

Results: No violations or deviations were identified.

- Third party technical audits of the work were performed.
- Contract personnel with technical expertise were added to the engineering staff during the duration of the project to ensure sufficient technical overview and guidance.

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

- *J. T. Fox, Engineer
- *J. M. Davis, Impell Contract Engineer
- *D. M. McGuire, Impell Contract Engineer

Sargent and Lundy Engineers (S&L)

- *R. H. Pollock, Project Manager
- *S. A. Gabrael, Supervisor, EMD
- *K. R. Panucci, Project Engineer, EMD
- *H. G. L. McCullough, Senior Quality Assurance Coordinator

*Denotes those present at the exit interview conducted on August 18, 1988.

2. Licensee Action on Previous Inspection Findings

(Closed) Open Item (373/86016-01): Clearances for increased displacements due to snubber elimination need to be checked.

As part of the snubber reduction programs being implemented at LaSalle, increased displacements due to additional piping flexibility were considered and adequately evaluated. (See Paragraph 4 in this report for additional details.) This item is considered closed.

3. Licensee Event Reports (LER)

(Closed) LER (373/88014-00) Eight snubbers failed functional test criteria.

The NRC inspector reviewed relevant portions of the following calculation to verify compliance with NRC requirements and licensee commitments:

- ° EMD 062445, "M09-R00-1025S Snubber Reduction Failure", Addendum A, May 20, 1988.

A force equal to the drag load of 10,197 lbs. was applied to the piping model at the snubber location. The load was based on the functional test data. Piping stresses and support loads which resulted from the application of the abnormal load were found to be acceptable.

Based on the methodology used in the analyses and the lack of significance associated with this occurrence, this item is considered closed.

4. Snubber Reduction Program

a. Background

The initial snubber population at LaSalle Station consisted of 1,187 snubbers in Unit 1 and 1,217 snubbers in Unit 2. During the first refueling outage for each unit, functional test failures eventually expanded the sample size to include 100% of the snubber population. The consequences from an outage duration, manpower requirement, and radiological exposure perspective easily justified the implementation of the full scale snubber reduction program. The final results indicate that 238 snubbers will remain in Unit 1 and 255 snubbers will remain in Unit 2. This is approximately an 80% reduction in the snubber population.

b. Procedure and Document Review

The NRC inspector reviewed relevant portions of the following documents to verify compliance with NRC requirements and licensee commitments:

- "Project Plan for Commonwealth Edison Company's LaSalle County Station, Unit 2", Revision 0, December 4, 1987;
- Project Instruction PI-LSNS-45, "Evaluation Requirements for the Impact of Increased Piping Deflection Resulting from Support Modifications on Safe Shutdown Items";
- Project Instruction PI-LSNS-20, "Clearance Walkdown Requirements";
- EMD 062014, "Basis for Walkdown Requirements", Revision 0, January 14, 1987;
- EMD 062445, "Piping Stress Analysis, 1RH-01", Revision 9, March 31, 1988; and
- EMD 064280, "Code Case N-411 Regulatory Compliance Report", Revision 1, January 7, 1988.

No adverse comments were made during the course of these reviews. It was noted that potential interferences due to increased pipe displacements were walked down and evaluated. This resolved the previously identified Open Item relating to this topic. It was also noted that the nonconformances identified during the initial Byron snubber reduction effort (see NRC Inspection Report No. 50-454/87007) were reviewed during the LaSalle work. As a result, it was determined that all technical concerns were included and adequately resolved.

No violations or deviations were identified.

c. Technical Reviews

During the course of the LaSalle snubber reduction effort, at least two technical audits were conducted by a third party reviewer. The scope and depth of these reviews indicated that timely, technical evaluations of the project were performed as the project progressed. In addition to these specific audits, the overall project management for CECO's part was performed by personnel with specific technical expertise in piping and pipe support analysis. Although the engineers managing the project were not on CECO's staff, as contract personnel they were committed full time to the overview of this work. In the NRC inspector's opinion, this aspect of the LaSalle snubber reduction effort was an excellent asset and went a long way towards the successful completion of the project.

5. Exit Interview

The Region III inspector met with the licensee representative (denoted in Paragraph 1) at the conclusion of the inspection on August 18, 1988. The inspector summarized the purpose and findings of the inspection. The licensee representatives acknowledged this information. The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed during the inspection. The licensee representatives did not identify any such documents/processes as proprietary.