U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-373/92005(DRS); No. 50-374/91026(DRS)

Docket Nos. 50-373; 50-374 Licenses No. NPF-11; No. NPF-18

Licensee: Commonwealth Edison Company
Opus West III
1400 Opus Place
Downers Grove, IL 60515

Facility Name: LaSalle County Nuclear Station - Units 1 and 2

Inspection At: LaSalle Site, Marseilles, IL

Inspection Conducted: December 16, 1991; January 30-31, February 4-5, and 28, 1992

Inspectors: K. D. Ward — 3-4-92 Date

A. J. Dunlop — 3-4-92 Date

Accompanied By: L. Sage, IDNS
(December 16, 1991 and January 30-31, 1992)

Approved By: J. M. Jacobson, Chief, Materials and Processes Section — 3-4-92 Date

Inspection Summary

Inspection on December 16, 1991; January 3-31, February 4-5, and 28, 1992 (Reports No. 50-373/92005(DRS); No. 50-374/91026(DRS)).

Areas Inspected: Routine, unannounced safety inspection of inservice inspection (ISI) activities including review of programs (73051), procedures (73052), observation of work activities (73753), and data review (73750); erosion/corrosion (E/C) activities (73051, 73052, 73753, and 73755).

Results: No violations or deviations were identified. Based on the results of the inspection, the NRC inspector noted the following:

- Management was involved in the ISI and the E/C activities in an effective manner.

- The ISI and E/C personnel had adequate expertise to perform their functions.
- All activities were controlled by well stated and defined procedures.

DETAILS

1. Persons Contacted

Commonwealth Edison Company (CECo)

*G. Diederich, Station Manager
*W. Huntington, Technical Superintendent
*J. Schmults, Project Superintendent
*R. Ragan, Administrative Engineer
*A. Kochis, ISI Coordinator
*D. Carlson, NRC Coordinator/Regulatory Assurance
*M. Hayes, Senior Nuclear Quality Program Inspector
M. Oclon, ISI Group Leader
D. Stepke, Erosion/Corrosion Coordinator
C. Richards, Nuclear Quality Programs Auditor
J. Hopman, QC Inspector

U. S. Nuclear Regulatory Commission (NRC)

*D. Hills, Senior Resident Inspector
C. Phillips, Resident Inspector

Illinois Department of Nuclear Safety (IDNS)

*J. Roman, Resident Inspector
L. Sage, Code Compliance Engineer

Hartford Steam Boiler Inspection and Insurance Company (HSB)

P. Fisher, ANII Supervisor
J. Tetreault, ANII

General Electric Company (GE)

T. Brinkman, Level III

The NRC inspector also contacted and interviewed other licensee and contractor employees.

*Denotes those present at the exit interview February 28, 1992.

2. Inservice Inspection - Unit 2

a. General

A pre-ISI meeting was held at the site December 6, 1991, to discuss the scope, schedule and any potential problem areas associated with the inservice inspection (ISI) activities.

b. Program Review (73051)

Personnel from GE and CECo performed the ISI in accordance with ASME Section XI, 1980 Edition, Winter 1980 Addenda. Where ASME requirements were determined to be impractical, specific relief requests were submitted to the Office of Nuclear Reactor Regulation (NRR) in writing. The NRC inspector reviewed the specific relief requests including the related correspondence between the licensee and the NRC. The NRC inspector reviewed CECo QA audit, No. QAS 01-92-001, and surveillances of ISI activities. These efforts were found to be comprehensive and performed by qualified personnel. Overall organizational staffing for the ISI program was found to be acceptable.

The sampling inspection plan for addressing intergranular stress corrosion cracking was reviewed and found to be in accordance with Generic Letter (GL) 88-01. All six welds examined in accordance with GL 88-01 were found to be acceptable.

c. Procedure Review (73052)

All applicable ISI procedures were approved by the Authorized Nuclear Inservice Inspector (ANII) and were reviewed by the NRC inspector. The ISI procedures were found to be in accordance with ASME Section V, 1980 Edition, Winter 1980 Addenda.

d. Data Review (73755)

The examination data was within the applicable ISI procedures and ASME Code requirements. The NRC inspector reviewed documents related to nondestructive examinations (NDE), equipment, data, and evaluations.

e. Observations of Work Activities (73753)

The NRC inspector observed work activities and had discussions with personnel during the ISI activities. These observations included the following:

(1) GE personnel performing ultrasonic and liquid penetrant examinations on pipe weld No. RI-2002-20. This weld was in the RCIC system.

(2) GE personnel performing magnetic particle examinations on reactor vessel head closure studs.

(3) CECo personnel performing visual examinations of the steam dryer welds using an underwater mini-sub

with a television camera in conjunction with the use of video tape recorders.

The NRC inspector reviewed the qualifications and certifications of all inspection personnel performing ISI to ensure conformance with SNT-TC-1A.

No violations or deviations were identified.

3. Erosion/Corrosion Activities (73051, 73052, 73753, 73755)

Commonwealth Edison Company began their erosion/corrosion (E/C) program in 1988. A formalized procedure and administrative controls were established to ensure continued long-term implementation of the E/C monitoring program for piping and components. This program was applicable to both safety related and nonsafety related systems with respect to E/C. Various references were used to establish the program, including NRC Bulletin No. 87-01, "Pipe Wall Thinning" and EPRI-NP-3944, "Erosion/Corrosion in Nuclear Power Plant Steam Piping."

An inspection sample is selected prior to every refueling outage utilizing the EPRI Chec, Checmate computer program. This program considers such variables as the effects created by poor geometry, high fluid velocities, moisture content, temperature conditions, historical chemistry data and piping/component material. When a piping component is found that has exhibited wall thinning due to E/C, an engineering analysis is performed. This analysis determines if the degraded component is acceptable for continued use or if repair/replacement is required. To date, there have been three emergency drain valve bodies on the heater drain system repaired as a result of the E/C program. The NRC inspector reviewed the program, procedure, data, and observed ultrasonic thickness examinations on the bottom of heater drain valve No. 2HD053.

No violations or deviations were identified.

4. (Closed) AMS No. RIII-92-A-006

a. Concern

Eight components had apparent magnetic particle examination (MT) indications and were written up as "Surface Insufficiently Prepped," prior to the record MT; foregoing an expanded inspection scope, and impact on scheduling.

(1) NRC Review

The NRC inspector reviewed the following:

1. Several MT data sheets including the eight MT data sheets of concern.

2. The MT procedure used for the Fall 1989 outage (NDT-B-1, Revision 4).

3. Several personnel certifications.

4. Several Fall 1989 MT reports written by the ANII (the ANII observed the MT on all eight welds of concern).

5. Several work requests which were issued to flap out indications.

6. ISI program for the Fall 1989 outage.

The NRC inspector also interviewed the CECo ISI coordinator and the ANII. These individuals were onsite and involved in MT during the Fall 1989 outage.

(2) Conclusion

In reviewing the data sheets on the eight Class 2 subject welds, it was found that none of the welds were reported as "Surface Insufficiently Prepped." Each weld had two to four MT reports stating that the pipe on each side of the welds had indications. The indications were most likely induced by manufacturing, fabrication or handling. All the indications were subsequently removed and the area re-examined. These indications were there at the time of the preservice inspection and found to be acceptable.

Commonwealth Edison Company's MT procedure NDT-B-1, Revision 4, used in the Fall 1989 outage, required that at least 1" on each side of the weld be examined. Because some of the subject indications were located near the examination area, the ANII requested CECo to remove them. This is good workmanship, however, does not constitute a requirement to expand the scope of inspection. Because there was no safety significance involved, no further action is considered necessary. This concern was not substantiated and is considered closed.

b. Concern

An individual was directed to instruct the GE ultrasonic examination (UT) operators (GE "Smart" system) to increase the automated UT scanning speed from 1" to 3" per second which was in violation of GE procedures.

(1) NRC Review

The NRC inspector reviewed the following:

1. UT documentation for the six Class I welds that were UT'd with the automated GE Smart System. These were the only welds UT'd with the Smart System during the Fall 1989 outage.

2. The four UT procedures utilized for the examinations:

   a. GE automated UT of dissimilar metal welds, UT-51, Revision No. 3. This procedure limited the scanning speed to 1" per second and was not qualified at EPRI.

   b. GE UT of pipe welds using automated equipment, UT-43, Revision No. 11. This procedure limited the scanning speed to 3" per second and was qualified at EPRI.

   c. CECo UT of safe end to nozzle welds, NDT-C-40, Revision 1. This procedure limited the scanning speed to 6" per second and was not qualified at EPRI.

   d. CECo UT of similar and dissimilar metal pipe welds, NDT-C-2, Revision 17. This procedure limited the scanning speed to 6" per second and was qualified at EPRI. This is in accordance with ASME Code, Section XI.

3. Several UT personnel certifications.

4. Fall 1989 reports written by the ANII. The ANII observed two of the six UT's and reviewed all the data.

(c) Conclusion

When the individual was instructed to inform the

GE UT operators to increase the scanning speed from 1" to 3", the scanning speed was in accordance with the EPRI approved GE procedure and the CECo procedures. While GE procedure No. UT-51, Revision 3, states that, "The rate of search unit movement shall not exceed 1" per second", this was not an EPRI approved procedure and was primarily used for the automated UT set-up. Because there was no safety significance involved and the UT was performed in accordance with approved EPRI procedures and the ASME Code, Section XI, no further action is considered necessary. This concern was not substantiated and is considered closed.

5. Exit Interview

The NRC inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection and summarized the scope and findings of the inspection noted in this report. The NRC 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 such documents/processes as proprietary.