U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-237/81-12

Docket No. 50-237 License No. DPR-19

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

Facility Name: Dresden Station, Unit 2

Inspection At: Dresden Site, Morris, Illinois

Inspection Conducted: April 9-10, 1981

Inspector: D H Danielson for W. J. Key 5/5/81

Approved By: D H Danielson D. H. Danielson, Chief 5/5/81
Materials and Processes Section

Inspection Summary

Inspection on April 9 and 10, 1981 (Report No. 50-237/81-12)
Areas Inspected: Review of specifications and procedures, observation of modification activities, and review of modification documentation related to Mark 1 Torus Internal Modifications; review of IEB 79-03A and IEB 80-08 actions. The inspection involved 15 inspector-hours onsite by one NRC inspector.
Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Commonwealth Edison Company (CECo)

*D. J. Scott, Station Superintendent
*R. Ragan, Assistant Station Superintendent
D. Wheeler, Station Construction Engineer
*J. D. Brunner, Station Technical Staff Supervisor
T. Kroll, Station Construction Engineer
R. Gardner, Quality Control Engineer
*E. F. Wilmere, Quality Assurance Supervisor
*R. W. Stobert, Quality Assurance Inspector
*E. Budzichowski, Station Operations
*D. Farrow, Station Administration
*J. E. Enigenburg, Station Maintenance
*M. Dillon, Station Operations
D. Schildgen, Quality Control Engineer

Phillips Getshaw

C. Rachke, Quality Control Supervisor
D. Breuer, Quality Control Inspector

*Denotes those present at the exit interview.

Licensee Action on IE Bulletins

IE Bulletin No. 80-08, Examination of Containment Liner Penetration Welds, Item 1, required licensees to determine whether their facility contained flued head designs as illustrated in Figure NE 1120-1 Winter 1975 addenda to the 1974 and later editions of the ASME B&PV Code. The bulletin further required the licensee to determine the type of weld joint, type of nondestructive examinations performed during construction and results.

On August 15, 1980, the licensee informed the Region office, that a review of construction records for Dresden Station, Units 2 & 3, indicated that flued head penetrations were used, and all welds required radiographic examination and a surface examination (MT or PT) and that no record of Ultrasonic examination in place of radiographic examination was found.

On April 9, 1981, the NRC inspector reviewed the following construction radiographs of containment penetration welds and determined that no backing rings were used.

Part No. 2-X105B-36, Weld No. 2
Part No. 2-X107B-34, Weld No. 2
Part No. 2-X149A-26, Weld No. 2
Part No. 2-X130-6, Weld No. 2
Part No. 2-X144-26, Weld No. 2
Part No. 3-X113-24, Weld No. 2
Part No. 3-X107B-34, Weld No. 2

Part No. 3-X105B-36, Weld No. 2
Part No. 3-X107A-34, Weld No. 2
Part No. 2-X113-24, Weld No. 2

This bulletin is considered closed.

IE Bulletin 79-03A, Longitudinal Weld Defects in SA-312 Type 304 Stainless Steel Pipe.

Item 1, required the licensee to determine whether ASME SA-312, Type 304 stainless or other welded (without filler metal) pipe was in use or planned for use in safety related systems of their facility. On April 12, 1979, the licensee reported to the Region III office, that a review of the design specifications and piping design tables for original construction and modifications indicated that for smaller pipe sizes (less than 14 inches) ASME SA-312 was used; however, the larger sizes were ASME SA-358 electric-fusion-welded pipe, and concluded that ASME SA-312 stainless steel pipe welded without filler metal is not present in the safety related systems of Dresden Units 1, 2, and 3.

The inspector reviewed the licensee's records and considers appropriate corrective actions were taken. This Bulletin is considered closed.

Functional or Program Areas Examined

1. Specification Review

The following specifications for torus internal modification were reviewed for conformance to NRC, ASME Code, and AWS requirements.

Sargent and Lundey (S&L) Specification K-4052 Torus Internal Modification - Units 2 and 3.

Nutech Repair Program COM-19-054 for SRV in Plant Test Instrumentation Modification.

Nutech - Com-19-003, Revision 0, In-Plant SRV Discharge Test, Dresden NPS, Unit 2.

The following work is being performed in accordance with Nutech drawings and S&L specifications on work request No. 4581, under the control of CECo Station Construction.

Modification - LPCI Full Flow test line into suppression chamber.
Nutech Drawing 64.313.0802.
Purpose. To create a mixing action in the primary containment suppression pool to prevent impingement on the internal catwalk.

Modification - Welding Brackets to each of the 16 existing U-shaped LPCI/CC spray header supports.
Purpose. To increase the capacity of LPCI/CC spray headers to resist postulated upward loads due to LOCA pool swell froth impingment.

Modification - Mounting thermowell through the Suppression chamber shell, in each of the 16 mitered bays located in the bottom half of the chamber.
Purpose. To house temperature sensors to monitor Suppression pool temperature.

Modification - Weld two (2) stiffener plates to the outside of each of 48 downcomer plates and to the bottom dead center region of the vent headers.
Purpose. To increase the capacity of the downcomer vent head intersection to resist postulated loads due to steam condensation and SRV valve discharge.

Modification - Installation of vent header deflector beneath the existing vent header.
Purpose. To resist postulated pool swell loads, while reducing pool swell loads on the existing vent headers.

Modification - Replacement of existing supports for catwalk inside suppression chamber.
Purpose. To give supports higher capacity to resist postulated loads due to pool swell, steam condensation, and SRV discharge.

Modification - Install instrumentation on suppression chamber torus supports, piping attached to torus, and on SRV discharge line supports.
Purpose. To obtain structural response data during actuation of an SRV.

CECo Surveillance Procedure No. DOS-250-5 automatic blow down system at low pressure and rated pressure.
Purpose. To detail steps to be followed to safely and effectively test the automatic blow down system.

2. Drawing Review

The following drawings of torus modifications were reviewed during the inspection.

Drawing No. 64.313.0315 - Downcomer Lateral Bracing Installation and Fabrication Details.

Drawing No. 64.313.0507 - Downcomer Vent Header Stiffener Installation and Fabrication Details.

Drawing No. 64.313.0802 - LPCI Full Flow Test Line Suppression Chamber Elbow and Internal Support Fabrication and Installation Details. A design change to this drawing by Nutech deleted the LPCI support. During the exit, the inspector voiced concern that with 5350 GPM at 350 psi and 26 fps the stresses at the chamber penetration would be such that a possibility exists for this line to break at the penetration. The licensee stated they they would pursue this concern further. This is an unresolved item. (237/81-12-01)

Drawing No. 64.313.0803 - HPCI Turbine Pot Drain Line Suppression Chamber Internal Support Fabrication and Installation.

Drawing No. 64.313.8085 - Spray Header Suppression Chamber Internals Support Fabrication and Installation.

Drawing No. 64.301.0105 - Vent Header Deflector.

Drawing No. 64313.0809 - HPCI Exhaust Vacuum Breaker Suppression Chamber Internal Support Fabrication and Installation.

No items of noncompliance or deviations were identified.

3. Observation of Activities

The inspector examined finished work and ongoing activities in the torus. The finished weld on one (1) LPCI full flow test line, welding of deflectors welds of the downcomer, supports, and catwalk reinforcements were examined. The inspector witnessed partial fit-up of the second LPCI full flow test line.

No items of noncompliance or deviations were identified.

4. Documentation Review

The following weld data sheets generated by the Phillips Getschow Company, of torus modification work were reviewed.

Relief Valve Discharge Pipe
Welding Procedure, Ma-11-0-5, Revision 5
Drawing No. B-1372-2-AA-Bay-1
Field weld No. 1 and 7

SRV Temporary Attachments
Drawing No. B-1372-2-BB
Field weld No. TA-4 and 15

Relief Valve Discharge Pipe
Drawing No. B-1371-1-AA-Bay-1
Field weld No. 10

SRV Piping Vacuum Braker
Drawing No. M-1045- Line No. 2-3019A/2-30
Field weld No. 2
Line No 2-3019-B, Weld No. 1 and 3
Line No. 2-3019-C, Weld No. 1 and 2

Downcomer Vent Header Stiffeners
Drawing No. B-0507-2-AA-Bay-3
Weld No. 1 and 4

No items of noncompliance or deviations were identified.

5. Welder Qualification Review

Qualification records of the following Phillips Getschow Company personnel were reviewed for conformance to the requirements of ASME Code, Section IX.

H. A. Arteaga	Stamp No. 216
J. Levan	Stamp No. 46
J. Thompson	Stamp No. 989
L. Blackstrom	Stamp No. 992
D. Malloy	Stamp No. HH7
D. Caloca	Stamp No. P8

No items of noncompliance or deviations were identified.

Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item identified during the inspection is discussed in Paragraph 2.

Exit Interview

The inspector met with licensee personnel (denoted in Persons Contacted) at the conclusion of the inspection on April 10, 1981. The item of concern identified in Paragraph 2 was discussed and acknowledged by the licensee.