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

REGION III

Report No. 50-483/81-19

Docket No. 50-483 License No. CPPR-139

Licensee: The Union Electric Company
Post Office Box 149
St. Louis, MO 63166

Facility Name: Callaway Plant, Unit 1

Inspection At: Callaway Site, Callaway County, MO

Inspection Conducted: August 12-14, 1981

Inspector: D H Danielson for W. J. Key 8/28/81

Approved By: D H Danielson D. H. Danielson, Chief 8/28/81
Materials and Processes Section

Inspection Summary

Inspection on August 12 ., 1981 (Report No. 50-483/81-19)
Areas Inspected: Review of reactor vessel internals installation procedures; observation of NSSS component installation, storage, and protection; review of reactor coolant pressure boundary piping installation, welding and NDE procedures; visual examination of welds. This inspection involved a total of 20 onsite inspector-hours by one NRC inspector.
Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Union Electric Company (UE)

*J. V. Laux, Supervisor Engineering QA
*R. L. Powers, Site QA Superintendent
*W. H Weber, Manager Nuclear Construction
*J. W. Millwood, QA Engineer
*R. Veatch, QA Assistant Engineer
*M. I. Doyne, General Superintendent

Daniel International Corporation (Daniel)

*G. M. Warblow, Service Manager
*A. D. Arnold, Project Quality Manager
*M. K. Smith, Audit Response Coordinator
J. Erickson, Mechanical Engineer
C. Keihn, NSSS Supervisor
R. Papini, Mechanical Engineer
*J. A. Holland, Engineering Manager

*Denotes those attending the exit meeting.

Functional or Program Areas Examined

1. Installation, Welding and NDE Procedure Review

The following procedures were reviewed for conformance to NRC and ASME Code requirements.

Work Procedures (WP)

WP-114, Revision 8
Rigging

WP-127, Revision 1
Control of Special Life Materials

WP-200, Revision 15
Field Fabrication and Installation of Piping and Component Supports

WP-205, Revision 12
Preparation and Processing of Travelers

WP-211, Revision 0
Cleanliness Control of Mechanical Equipment

Westinghouse Specification No. 2463A68-G01
Four Loop Standard Reactor Internals Assembly Specification.

WP-502, Revisio 12
Qualification of Welders

WP-503, Revision 15
Control of Welding Consumables

WP-504, Revision 5
Weld Repair

WP-506, Revision 2
Control of Tools used on Stainless Steel Pipe, Plate, and Shapes

WP-400, Revision 3
Zoning and Controlled Entry

Welding Procedures (WPS)

WPS-N-1-3, Revision 6
Welding of Carbon Steel to Alloy Steel, PQT-149, 324

WPS-N-1-8, Revision 8
Welding of Carbon Steel to Stainless Steel, PQT-44, 163, 164, 42, 371

WPS-N-8-8, Revision 27
Welding of Stainless Steel, PQT-53, 94, 40, 335, 111, 180

WPS-N-8-45, Revision 3
Welding of Stainless Steel, P-8 to Nichel Base Alloy P-45, PQT-158

Nonedestructive Examination Procedures (NDE)

NDE-7.1-1, Revision 0
Certification of Visual Examination Personnel

NDE-7.1Q
Certification of NDE Personnel

NDE-7.3C, Revision 4
Liquid Penetrant Examination of Weldments

NDE 7.4A, Revision 3
Magnetic Particle Examination of Weldments ASME Code

NDE-7.5C3, Revision 3
Radiographic Examination of Weldments

No items of noncompliance or deviations were identified

2. Observation of Activities

The following items of NSSS equipment were examined in storage for cleanliness, protection and controlled access.

Reactor Vessel Internals and Cavity

The reactor internals are stored in the vessel covered and clean. Access to the cavity for personnel, tools, and equipment is controlled in accordance with procedures.

Steam Generators

All steam generators have been installed, access through the manways are covered and locked. The interior is protected from dirt and moisture.

Reactor Coolant Pumps

The reactor coolant pumps and internals are installed, motors have not been connected, heaters are being maintained for moisture protection.

Reactor Vessel Head

The reactor vessel head is stored on the refueling floor with access controlled in accordance with procedures.

No items of noncompliance or deviations were identified.

3. Visual Examination of Welds

The inspector examined completed welds in the following systems for conformance to ASME Code requirements for inservice inspection.

High Pressure Coolant Injection
EM03, FW-1, FW-3

Accumulator Safety Injection
EP01, Weld-A, Weld-B

Reactor Coolant
BB-Weld-2, Weld-4

No items of noncompliance or deviations were identified.

4. Documentation Review

The following Weld control records and radiographs of reactor coolant piping were examined for conformance to NRC and ASME Code requirements

Radiographic Review

DWG. 2-BG-03-S020/122, Weld "C"

DWG. 2-EN-02-S-015/111, Weld "A"

DWG. 2-EF-03-S-18/134, Weld "B"

DWG. 2-OP Loop 2, SG side, Weld-3

DWG. 2-OP Loop 2, RCP Side, Weld-W4

DWG. 2-BB01, Weld-F108

DWG. 2-BB01, Weld-F103

DWG. 2-BB01, Weld-F402

DWG. 2-BB01, Weld-F304

DWG. 2-BB01, Weld-F207

SCP1-Surge 1, Weld-6

SCP-Surge 3, Weld-2

SCP-Surge 3, Weld-3

SCP-Surge 3, Weld-8

Weld Control Records

DWG. FS-M-D-M-03BB01(Q)
Weld No. 2-BB-01-F001
Spool No. S-402 to S-001
RT Report - 03855
PT Report - 01416, 01434

DWG. FS-M-D-M-03BB01(Q)
Weld No. 2-BB-01-F002
Spool S-001 to S-002
RT Report - 03753
PT Report - 01397

DWG. FS-M-D-M-03BB01(Q)
Weld No. 2-BB-01-F004
Spool S-003 to Pressurizer T BB03
RT Report - 3365
PT Report 1238, 1222

DWG. FS-M-D-M-03BB1(Q)
Weld No. 2-BB-01-F105
S G E BB01A to Spool S-103

DWG. M-03BB01(Q)
Weld No. 2-BB-01-F108
Spool S-104 to S-105
RT Report - 05416, 05256
PT Report - 02424, 2443, 2259, 2257

DWG. M-03BB-01(Q)
Weld No. 2-BB-01-F306
Spool S-303 to S-304
RT Report - 05227
PT Report - 02283, 02282

No items of noncompliance or deviations were identified.

5. Unresolved Matter Identified During Independent Inspection

On July 26, 1981 the licensee generated NCR 2SN-4340 when it was discovered that the right wheel on snubber assembly "A" on the Polar Crane in the reactor building had worn through the 4½" diameter axle. The axle did not break, however, only a section 2 5/16" long by 1 9/64" thick remained of the axle. The wheel bore was grooved to a depth of 1/32".

All wheels and axles of the three (3) remaining snubber assemblies were examined. No indications of wear was noted.

The licensees Architect Engineers (AE) Bechtel Power Corporation, and the Crane manufacture P&H Harnischferger Corporation (P&H) are investigating the cause of the problem. It is suspected that the cause of the problem is localized out-of-tolerance of the Polar Crane rail and girders.

The inspector examined the snubber assembly wheel flanges and axle bore. There appeared to be no damage to these items.

On August 7, 1981 the licensee and Bechtel requested permission of P&H to conditionally release the crane for operation. This was granted on August 11, 1981, however, a thorough visual examination is to be performed prior to making lifts greater than 30 tons.

This is considered an unresolved item pending review of the final resolution to this matter. (483/81-19-01)

Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. One unresolved item disclosed during this inspection is discussed in Paragraph 5.

Exit Interview

The inspector met with licensee representatives (denoted under Persons Contacted) at the conclusion of the inspeciton. The inspector summarized the purpose and findings of the inspection.