



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION II - SUITE 818
230 PEACHTREE STREET, NORTHWEST
ATLANTA, GEORGIA 30303

TELEPHONE: (404) 526-4503

RO Inspection Report No. 50-313/73-16

Licensee: Arkansas Power and Light Company
Sixth and Pine Streets
Pine Bluff, Arkansas 71601

Facility Name: Arkansas Nuclear One, Unit 1
Docket No.: 50-313
License No.: CPPR-57
Category: A3/B1

Location: Russellville, Arkansas

Type of License: B&W, PWR-2568 Mwt, 880 Mwe

Type of Inspection: Special, Announced, Construction

Dates of Inspection: October 23-26, 1973

Dates of Previous Inspection: September 11-14, 1973 and
September 25-28, 1973

Inspector In Charge: A. R. Herdt, Metallurgical Engineer
Engineering Section
Facilities Construction Branch

Accompanying Inspectors: None

Other Accompanying Personnel: None

Principal Inspector: V. L. Brownlee 11/8/73
V. L. Brownlee, Reactor Inspector Date
Facilities Section, Facilities Construction
Branch

Reviewed by: W. A. Crossman 11/9/73
W. A. Crossman, Senior Inspector Date
Facilities Section, Facilities Construction
Branch

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SUMMARY OF FINDINGS

I. Enforcement Action

A. Violations

None

B. Safety Items

None

II. Licensee Action on Previously Identified Enforcement Matters

A. Violations

None

B. Safety Items

None

III. New Unresolved Items

73-16/1 Radiography Review

The licensee agreed to review for weld acceptability and radiographic quality the radiographs for reactor building spray system spool pieces BS-HCB-A6-33 and BS-HCB-A4-32 and field weld HCB 6-8. (Details I, paragraph 3)

IV. Status of Previously Reported Unresolved Items

72-12/2 Valve Wall Thickness Verification (Region II Letters, June 30, 1972, and February 16, 1973)

The draft of the valve wall thickness verification program report was presented for review. The program and documentation was found to be incomplete. Thickness measurements were not made of valve bonnets and covers or all weldend preparation. This item remains open.

V. Design Changes

None

VI. Unusual Occurrences

None

VII. Other Significant Findings

A. Project Status

None

B. Personnel or Organizational Changes

None

C. Inquiry Reports

None

VIII. Management Interview

Our findings were discussed at the conclusion of the inspection with Mr. Moore, Chief QA Coordinator.

DETAILS I

Prepared by:

A R Herdt
A. R. Herdt, Metallurgical Engineer
Engineering Section
Facilities Construction Branch

11/9/73
Date

Dates of Inspection: October 23-26, 1973

Reviewed by:

J C Bryant
J. C. Bryant, Senior Inspector
Engineering Section
Facilities Construction Branch

11/9/73
Date

1. Persons Contacted

a. Arkansas Power and Light Company (AP&L)

N. A. Moore - Chief Quality Assurance Coordinator
C. L. Bean - Quality Assurance Inspector

b. Contractor Organizations

Bechtel Corporation (Bechtel)

W. D. Schuster - Senior Field Welding Engineer
P. W. Sly - Project Field Quality Control Engineer

Babcock and Wilcox Construction Company (B&W)

F. J. Sattler - Manager, Inservice Inspection

2. Preoperational (Baseline) Inspection Program Review

According to the FSAR, the reactor coolant pressure boundary inservice inspection program is to be in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 1971, including the 1971 winter addenda.

Prior to initial unit operation, B&W is performing the required non-destructive examination (NDE) of reactor coolant system pressure boundary welds to establish preoperational integrity and baseline data for future inspections. B&W reported that the required inspections are complete except for the coreflood piping, decay heat removal crossover piping modification and the reactor vessel where the remote ultrasonic tool will be used.

B&W has not completed its evaluation of all the indications found; however, one problem area on primary piping was identified. Indications were noted in MK39, a 74° 30' elbow in the outside seam of the 1A1 discharge line (reactor inlet line). The indications were detected by longitudinal beam normal to the pipe surface, which is the most likely method to find laminar types of indications. Angle beam showed nothing reportable and fabrication radiographs were reviewed as well as new radiographs taken in the suspected area. After plotting and review of the ultrasonic and radiographic test results, B&W resolved the indications as laminations in the pipe.

The inspector reviewed the NDE procedures to be used for the baseline inspection and no discrepancies were noted. The inspector stated that a review of all the baseline inspection data, including the remote UT tool data used on the reactor vessel, would be required by RO prior to licensing. The licensee agreed to keep RO informed as to when the remaining baseline inspection would be performed so that this could be witnessed by the inspector.

3. Followup Record Review of Welding and Nondestructive Testing

The inspector conducted a walkthrough inspection of completed weld joints on the decay heat removal crossover modification located in the reactor building as well as the reactor building spray system, makeup and purification system, and decay heat system all located in the auxiliary building. Contour and weld profile appeared adequate except for the welds in the reactor building spray system, as noted below, and there were no indications of arc strikes or weld splatter.

The inspector reviewed Bechtel's records of QC inspection of welding on the above mentioned systems. In order to test Bechtel's quality control records for completeness and accuracy, the inspector selected the following list of field welds during a visual inspection of welded joints:

a. Decay Heat Removal Cross Over Modification

- (1) Iso. No. 7DH-23 Rev 3
Field Welds: CCBl-30, 1-33, 1-5N, 1-5M, 1-37
- (2) Iso. No. 7DH-22A Rev 3
Field Welds: CCBl-17, 1-29, 1-14C, 1-25, CCA6-17

Letter to Arkansas Power and Light Company
dated NOV 12 1973 50-313/73-16

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