

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Report: 50-313/82-04
50-368/82-04

Licenses: DPR-51
NPF-6

Dockets: 50-313
50-368

Licensee: Arkansas Power and Light Company

Facility Name: Arkansas Nuclear One (ANO), Units 1 and 2

Inspection At: ANO Site, Russellville, Arkansas

Inspection Conducted: February 1-28, 1982

Inspectors: W. D. Johnson
W. D. Johnson, Senior Resident Reactor Inspector
(Paragraphs 1, 2, 3, 4, & 6)
L. J. Callan
L. J. Callan, Resident Reactor Inspector
(Paragraphs 1, 2, 3, 4, 5, & 6)

3/11/82
Date

3/12/82
Date

Approved: R. E. Hall
R. E. Hall, Chief, Reactor Project Section C

3/16/82
Date

Inspection Summary

Inspection conducted during period of February 1-28, 1982 (Report 50-313/82-04)

Areas Inspected: Routine, announced inspection including operational safety verification, surveillance, maintenance, and follow up on previously identified items.

The inspection involved 39 inspector-hours on site by two NRC inspectors.

Results: Within the four areas inspected, two apparent violations were identified in two areas (missing seismic support, paragraph 2; and category E valves mispositioned, paragraph 3).

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Inspection conducted during period of February 1-28, 1982 (Report 50-368/82-04)

Areas Inspected: Routine, announced inspection including operational safety verification, surveillance, maintenance, and follow up on previously identified items.

The inspection involved 44 inspector-hours on site by two NRC inspectors.

Results: Within the four areas inspected, one apparent violation was identified in one area (licensed operator on-the-job training, paragraph 2).

DETAILS

1. Persons Contacted

J. P. O'Hanlon, ANO General Manager
J. Levine, Engineering & Technical Support Manager
B. A. Baker, Operations Manager
T. N. Cogburn, Plant Analysis Superintendent
E. C. Ewing, Plant Engineering Superintendent
L. Sanders, Maintenance Manager
J. McWilliams, Unit 1 Operations Superintendent
J. Albers, Planning and Scheduling Supervisor
M. J. Bolanis, Health Physics Superintendent
R. Wewers, Unit 2 Operations Superintendent
D. Wagner, Health Physics Supervisor
L. Dugger, Special Projects Manager
L. Humphrey, Administrative Manager
C. Burchard, Health Physics Supervisor
S. Lueders, Radwaste Coordinator
L. Schempp, Quality Control Manager
C. Halbert, Mechanical Engineering Supervisor

The NRC inspectors also contacted other plant personnel, including operators, technicians, and administrative personnel.

2. Follow Up on Previously Identified Items (Units 1 and 2)

(Closed) Severity Level IV Violation 313/8128-03: Seismic support not bolted as required.

In September 1981, the NRC inspector had found that one of the two required bolts and both required nuts were missing from a seismic support on one of the two starting air systems for the Unit 1, number 2 Emergency Diesel Generator. The licensee repaired this support under Job Order 15592. During a follow-up inspection on February 8, 1982, the NRC inspector found that another seismic support on the same line, GBD-22, was missing it's pipe strap. The hanger locations for this line are shown on drawing DO-208-H and the support configurations are shown on drawing M-1021, Sheet 1. This drawing indicates that the seismic guide will include a pipe strap, which is welded or bolted to the pipe support. The licensee's failure to maintain the seismic supports on line DBD-22 in the design configuration is an apparent violation. (313/8204-01)

(Closed) Unresolved Item 313/8125-02; 368/8124-04: Fire Detection Systems.

The NRC inspector verified that the Unit 1 fire detection system was operable and that the Unit 1 licensed operators were

cognizant of the design changes and resulting procedural changes. Therefore, this item is considered closed for Unit 1. However, based upon discussions with Unit 2 licensed operators on February 8, 1981, and review of requalification training records, the NRC inspector determined that at least one entire shift of licensed operators, consisting of a senior reactor operator (the shift supervisor) and two reactor operators, were unaware of the status and scope of, and had not received training on the design changes modifying the Unit 2 fire detection system (design change package 79-2082). Additionally, the NRC inspector determined that these licensed operators had not received training on new Plant Procedure 2203.09 governing the operation of the modified fire detection system and were not aware of the procedure's existence. This is an apparent violation of paragraph 3 of Appendix A to 10 CFR 55 which states, in part: "The requalification program shall include on-the-job training so that: ... c. Each licensed operator and senior operator is cognizant of facility design changes, procedure changes, and facility license changes." (368/8204-01)

3. Operational Safety Verification (Units 1 and 2)

a. Scope of the Inspection

The NRC inspectors observed control room operations, reviewed applicable logs, and conducted discussions with control room operators. The inspectors verified the operability of selected emergency systems, reviewed tagout records, and verified proper return-to-service of affected components. Tours of accessible areas of the units were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibration and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspectors, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The NRC inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. The NRC inspectors walked down the accessible portions of the starting air systems for Unit 1 Emergency Diesel Generators 1 and 2, and the Unit 2 Condensate Storage Tank and Service Water supplies to the Emergency Feedwater Pumps to verify operability. The NRC inspectors also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

These reviews and observations were conducted to verify that facility operations were in conformance with the requirements established under Technical Specifications, 10 CFR, and administrative procedures.

b. Valve Alignment in Unit 1 Makeup System

On February 4, 1982, the NRC inspector checked the positions of the manual valves associated with the following portions of the Unit 1 Makeup System with the C Makeup Pump in Engineered Safeguards (ES) Standby:

- Suction valves
- Suction crossconnect valves
- Borated Water Storage Tank Supply
- Discharge Valves
- Discharge crossconnect valves
- High Pressure Injection (HPI) crossconnect valves
- HPI throttle valves
- Makeup pump recirculation throttle valves
- Makeup pump recirculation isolation valves
- Supply valves from Decay Heat Removal System
- Service water valves in supply and return lines
for pump lube oil coolers and room coolers

All valves inspected were found to be in the required position except for MU-23 and MU-24. These two manual valves are in series in the crossconnect line between the discharge of the B and C Makeup Pumps. With the C Makeup Pump in ES Standby, system Operating Procedure 1104.02 requires that MU-23 be locked closed and MU-24 be locked open. The NRC inspector found that MU-23 was locked open and MU-24 was locked closed. Although the identified valve misalignment had no adverse impact on plant safety or system operability, it is an apparent violation. (313/8204-02) Following identification of this discrepancy to the Unit 1 Shift Supervisor, the two valves were promptly repositioned.

4. Monthly Maintenance Observation (Units 1 and 2)

Station maintenance activities of safety-related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, Regulatory Guides, and industry codes or standards and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operations were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; radiological controls were implemented; and fire prevention controls were implemented.

Work requests were reviewed to determine status of outstanding jobs and to assure that priority was assigned to safety-related equipment and maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

- . Repair Channel D Core Protection Calculator (J.O. 24120)
- . Repair of Channel C Core Protection Calculator Disk Drive (Procedure 2304.35 and J.O. 14155)
- . Repair of 2CV-1075-1, Emergency Feedwater Isolation Valve to "B" Steam Generator, Unit 2 (J.O. 28075)

No violations or deviations were identified.

5. Monthly Surveillance Observation (Units 1 and 2)

The NRC inspector observed the Technical Specification required monthly surveillance testing on the Unit 1 "A" Containment Spray Pump, P-35A, and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operations were met, that removal and restoration of the affected components were accomplished, that test results conformed with Technical Specifications and procedure requirements, that test results were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The NRC inspector also witnessed portions of the following test activities:

- . Unit 2 monthly test of the "B" Charging Pump (Procedure 2104.02, Supp. B)
- . Unit 1 monthly test of Channel D of the Reactor Protective System (Procedure 1304.04)

No violations or deviations were identified.

6. Exit Interview

The NRC inspectors met with Mr. J. P. O'Hanlon (Plant General Manager) and other members of the AP&L staff at the end of various segments of this inspection. At these meetings, the inspectors summarized the scope of the inspection and the findings.