

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-313/84-22
50-368/84-22

Licenses: DPR-51
NPF-6

Dockets: 50-313
50-368

Licensee: Arkansas Power and Light Company
P. O. Box 551
Little Rock, Arkansas 72203

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

Inspection At: ANO Site, Russellville, Arkansas

Inspection Conducted: July 1-31, 1984

Inspectors: *W. D. Johnson for*
W. D. Johnson, Senior Resident Reactor Inspector
(pars. 1, 4, 5, 6)

8/9/84
Date

P. N. Harren
P. N. Harren, Resident Reactor Inspector
(pars. 1, 2, 3, 4, 5)

8/9/84
Date

Approved: *L. E. Martin for*
L. E. Martin, Chief, Project Section A,
Reactor Projects Branch 2

8/11/84
Date

Inspection Summary

Inspection Conducted July 1-31, 1984 (Report 50-313/84-22)

Areas Inspected: Routine, announced inspection of maintenance, surveillance, operational safety verification, followup on previously identified items, and preparation for refueling.

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The inspection involved 53 inspector-hours onsite by two NRC inspectors.

Results: Within the five areas inspected, no violations were identified.

Inspection Summary

Inspection Conducted July 1-31, 1984 (Report 50-368/84-22)

Areas Inspected: Routine, announced inspection of operational safety verification, maintenance, surveillance, and followup on previously identified items.

The inspection involved 57 inspector-hours onsite by two NRC inspectors.

Results: Within the four areas inspected, no violations were identified.

DETAILS

1. Persons Contacted

- *J. Levine, ANO General Manager
- E. Ewing, Engineering & Technical Support Manager
- B. Baker, Operations Manager
- L. Sanders, Maintenance Manager
- J. McWilliams, Unit 1 Operations Superintendent
- M. Bolanis, Health Physics Superintendent
- R. Wewers, Unit 2 Operations Superintendent
- *T. Cogburn, Special Projects Manager
- T. Baker, Technical Analysis Superintendent
- H. Hollis, Security Coordinator
- G. Provencher, Quality Assurance Supervisor
- *D. Lomas, Plant Licensing Supervisor
- S. Strasner, Quality Control Supervisor
- B. McCord, Quality Control Inspector
- G. Fiser, Radiochemistry Supervisor
- C. Shively, Plant Engineering Superintendent
- R. Tucker, Electrical Maintenance Superintendent
- B. Converse, Plant Performance Supervisor
- R. Hooper, Nuclear Buyer
- *P. Campbell, Plant Licensing Engineer
- L. Taylor, Plant Licensing Engineer
- R. Blankenship, Nuclear Engineer
- B. Bata, Quality Assurance Engineer

*Present at exit interviews.

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

2. Followup on Previously Identified Items (Units 1 and 2)

(Closed) Severity Level IV Violation 313/8310-03: Use of inadequate procedure to perform maintenance.

The NRC inspector reviewed Procedure 1402.09, "Emergency Feedwater Pump Maintenance" and verified that the licensee has revised the procedure to provide adequate instructions. Verification included a review of Procedure 1402.09 against the requirements stated in the vendor technical manual. In addition, the NRC inspector also reviewed Procedure 1000.07, "Deviations and Nonconformances" to verify the licensee

had revised the procedure to include identified deficiencies in procedures within the scope of the nonconformance report program. The inspector noted that the licensee had scheduled, in a letter to the NRC dated July 22, 1983, approval of Procedure 1000.07, Revision 2, by September 1, 1983. Revision 2 was actually approved on July 11, 1984. The licensee stated that approval of the procedure revision was delayed due to the number of rewrites required prior to obtaining management approval. The NRC inspector discussed with the licensee, the necessity for NRC notification whenever a scheduled or committed date specified in a response to a violation or deviation could not be met. The NRC inspector also stressed the importance of documenting the NRC concurrence of a newly negotiated commitment or scheduled completion date.

- (Closed) Severity Level VI Violation 313/8105-01: Failure to provide suitably controlled environmental conditions for integrated leak rate test.

The NRC inspector verified that the licensee had revised Procedure 1309.09, "Integrated Leak Rate Test," to provide appropriate access and environmental control for the data acquisition system during the performance of the integrated leak rate test. The NRC inspector also verified that the licensee had included the appropriate controls in the leak rate test procedure for Unit 2.

- (Closed) Severity Level V Violation 368/8321-04: Removal of electrolyte from station batteries without written instructions.

The licensee has revised the Unit 2 station battery maintenance and surveillance procedures to include instructions for electrolyte removal. The NRC inspector also verified that the Unit 1 procedures had been revised to include electrolyte removal requirements. All procedures have been revised, except Procedure 1307.05, which required additional clarification. The licensee stated the appropriate clarifications would be made.

- (Closed) Open Item 313/8201-03; 368/8201-03: Preventive maintenance (PM) program for motor-operated valve (MOV) torque switches.

The licensee has instituted, as part of the PM program, checks on MOV torque and/or limit switches. The NRC inspector reviewed the appropriate procedures to verify the instructions

provided were clear, complete, and adequate. The NRC inspector also verified that a PM program existed for each type of safety-related valve in the plant.

(Closed) Open Item 368/8314-01: Followup on Vendor Program Branch inspection at Combustion Engineering (CE).

The licensee has reviewed the documentation for procurement of the excore detector modifications from CE. Based on this review, the licensee stated that no additional programmatic corrective measures are necessary. The NRC inspector reviewed the CE procurement documentation and also randomly reviewed other procurement documents and found no additional discrepancies.

(Open) Severity Level IV Violation 368/8325-05: Operation of the vibration and loose parts monitor.

The NRC inspector reviewed the actions taken by the licensee to correct the deficiencies noted in the violation. The review included verification that the I&C, plant performance, and operations groups had satisfactorily completed their corrective actions. No problems were noted in this area.

NRC Inspection Report 50-368/83-25 identified a number of errors in Procedure 2105.02, "Vibration and Loose Parts Monitor System." During the NRC inspector's review, it was noted that the licensee has not yet revised the procedure to correct the identified errors. This violation will remain open pending correction of the errors and approval of the revised procedure.

(Open) Unresolved Item 313/8134-03; 368/8134-02: Clarification of the definitions for component cyclic or transient limits.

The NRC inspector reviewed Procedure 1022.22, "Transient and Failure Evaluation," against the definitions for component cyclic and transient limits provided in the Units 1 and 2 FSAR and the Unit 2 Technical Specifications. During the review, it was noted that the definitions provided in the procedure did not accurately or completely reflect the definitions provided in the FSARs and Technical Specifications. This item will remain open pending correction of the procedure and approval of the revised procedure.

3. Preparation For Refueling (Unit 1)

The NRC inspector observed the handling, receipt inspection, and storage of four of the new fuel assemblies received by the licensee. The above activities were satisfactorily performed in accordance with Procedure 1503.02, "Fresh Fuel Inspection and Storage" and Procedure 1503.04, "Fresh Fuel Shipping Container Operations." Prior to initiation of new fuel activities, the NRC inspector reviewed the above procedures for technical adequacy, administrative controls, and required approvals. This inspection will be continued to monitor additional licensee activities in this area.

No violations or deviations were noted.

4. Monthly Surveillance Observation (Units 1 and 2)

The NRC inspector observed the Technical Specification required surveillance testing on the Unit 2 station batteries (Procedure 2403.24) and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with Technical Specification 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 inspector also witnessed portions of the following test activities:

- . Monthly test of Unit 1 reactor protection system, channel A (Procedure 1304.37)
- . Monthly test of Unit 2 vibration and loose parts monitor (Procedure 2105.02)

No violations or deviations were identified.

5. Operational Safety Verification (Units 1 and 2)

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. In addition, the inspectors ensured that maintenance requests had been initiated for equipment in need of maintenance. The inspectors, by observation and direct interview, verified that the physical security program 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 both trains of the Unit 2 emergency feedwater system to verify operability. The inspectors 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.

Unit 2 emergency feedwater system walkdown was performed using Procedure 2106.06 and Drawings M-2206, M-2212, M-2210, and M-2204, Sheet 4. During preparation for the walkdown, the NRC inspectors identified minor discrepancies between Attachment A of Procedure 2106.06 and Drawing M-2204, Sheet 4. The discrepancies were identified to the appropriate licensee personnel.

No violations or deviations were identified.

6. Monthly Maintenance Observation (Units 1 and 2)

Station maintenance activities of safety-related systems and components listed below were 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 operation 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 ensure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were reviewed:

- . Repair of body-to-bonnet leak on Unit 1 feedwater valve FW-26 (J.O. 69889 and J.O. 72069)
- . Repack Unit 2 valve 2CV-4831 (J.O. 70317)
- . Clean service water pump discharge strainer (J.O. 71160)
- . Replace overheated power supply in channel C of the plant protection system (J.O. 71699)
- . Perform the semiannual leak rate test of the Unit 2 containment personnel hatch (J.O. 69364)

No violations or deviations were identified.

7. Exit Interview

The NRC inspectors met with Mr. J. M. Levine (ANO 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.