

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Report: 50-313/82-19
50-368/82-16

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: August 1-31, 1982

Inspectors: W.D. Johnson
W. D. Johnson, Senior Resident Reactor Inspector
(Paragraphs 1, 2, 3, 4, 5, 7)

9/3/82
Date

L. J. Callan
L. J. Callan, Resident Reactor Inspector
(Paragraphs 1, 2, 3, 4, 6, 7)

9/7/82
Date

Approved: D. M. Hunnicutt
D. M. Hunnicutt, Acting Chief, Reactor Project Section C

9/10/82
Date

Inspection Summary

Inspection conducted during period of August 1-31, 1982 (Report 50-313/82-19)

Areas Inspected: Routine, announced inspection including operational safety verification, surveillance, maintenance, followup on IE Bulletin 82-02, environmental qualification of electrical equipment, and review of plant operations.

The inspection involved 47 inspector-hours onsite by two NRC inspectors.

Results: Within the six areas inspected, one apparent deviation was identified (information not submitted to NRC contractor as committed, paragraph 6).

Inspection conducted during period of August 1-31, 1982 (Report 50-368/82-16)

Areas Inspected: Routine, announced inspection including operational safety verification, surveillance, maintenance, followup on IE Bulletin 82-02, and review of plant operations.

The inspection involved 37 inspector-hours onsite by two NRC inspectors.

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

DETAILS SECTION

1. Persons Contacted

J. M. Levine, ANO General Manager
E. C. Ewing, Engineering & Technical Support Manager
B. A. Baker, Operations Manager
L. Sanders, Maintenance Manager
J. McWilliams, Unit 1 Operations Superintendent
G. Helmick, Planning and Scheduling Supervisor
M. J. Bolanis, Health Physics Superintendent
R. Tucker, Health Physics Superintendent
R. Wewers, Unit 2 Operations Superintendent
D. Wagner, Health Physics Supervisor
L. Dugger, Special Projects Manager
L. Humphrey, Administrative Manager
J. Lamb, Safety and Fire Prevention Coordinator
T. Baker, Technical Analysis Superintendent
R. Gillespie, Chemical and Environmental Supervisor
H. Hollis, Security Coordinator
P. Jones, Instrumentation and Controls Superintendent
V. Pettus, Mechanical Maintenance Superintendent
J. Ray, Quality Control Engineer
P. Rogers, Special Projects Coordinator
J. Marshall, Licensing Manager
A. McGregor, Plant Analysis Superintendent
D. Lomax, Nuclear Support Supervisor
M. Konya, Nuclear Engineer

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

2. 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 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 Unit 2 'A' and 'B' low pressure safety injection trains, Unit 1 borated water storage tank flowpath to the high pressure injection pumps, the Unit 1 and 2 diesel fuel oil storage vaults, and the station fire water system to verify operability. The inspectors also witnessed portions of the radioactive waste system controls associated with radwaste shipments and barreling.

3. Monthly Surveillance Observation (Units 1 and 2)

The NRC inspector observed the Technical Specification required surveillance sampling and analysis of emergency diesel generator and fire diesel fuel oil 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 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 inspector also witnessed portions of the following test activities:

- . Radiation process monitor system calibration (Procedure 2304.27)
- . Unit 2 emergency diesel generator No. 2 monthly test (Procedure 2104.36, Supplement 2)

While observing technicians drawing a sample from the fire diesel fuel oil day tank, the NRC inspector observed that the oil purged through the sample connection prior to sample collection was allowed to spill to the floor. This practice is poor from a housekeeping/fire prevention aspect. This is an open item (313/8219-02; 368/8216-01) pending a procedure change to require proper handling of waste diesel fuel oil during sampling.

No violations or deviations were identified.

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 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 assure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

- . Disassembly of Unit 1 "C" reactor coolant pump (J.O. 32854 and Maintenance Procedure 1401.02)
- . Repair leak on valve MU-45B (J.O. 32383)

No violations or deviations were identified.

5. IE Bulletin Followup (Units 1 and 2)

For IE Bulletin 82-02 the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presented in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

IE Bulletin 82-02, "Degradation of Threaded Fasteners in the Reactor Coolant Pressure Boundary of PWR Plants," was issued on June 1, 1982. The licensee's initial response to this bulletin was dated August 2, 1982. Item 3a. of the bulletin asked the licensee to:

Identify those bolted closures of the RCPB that have experienced leakage, particularly those locations where leakage occurred during the most recent plant operating cycle. Describe the inspections made and corrective measures taken to eliminate the problem. If the leakage was attributed to gasket failure or its design, so indicate.

The licensee's response to this item was, "During the latest operating cycle, no RCPB bolted closure leaks within the scope of IEB 82-02 have been identified." This response is inaccurate, in that it fails to include the requested information concerning a leaking 'A' steam generator lower primary manway identified on Unit 1 on July 14, 1981. This leak caused a unit shutdown and was discussed in NRC Inspection Reports 50-313/8124 and 50-313/8125. The licensee has been requested to provide an additional bulletin response, providing details on this leak and on one which occurred on the Unit 2 'B' steam generator hot leg manway on August 21, 1982.

6. Environmental Qualification of Electrical Equipment (Unit 1)

The licensee was requested by the NRC, in letters dated January 20, 1982, and February 19, 1982, to submit additional information relating to environmental qualification of safety-related electrical equipment for Unit 1. This information was to be provided to Franklin Research Center, a review contractor for the NRC. In a letter to the Commission dated April 16, 1982, the licensee proposed to respond to these requests by May 15 and 31, 1982, respectively. However, in a letter to the licensee, dated July 15, 1982, the NRC noted that the requested information had not yet been sent to Franklin Research Center, and the licensee was requested to expedite the information to the Franklin Research Center, no later than 30 days from the date of the letter. The failure of the licensee to submit the additional information concerning environmental qualification of safety-related equipment by the proposed dates is an apparent deviation from a commitment to the Commission. (313/8219-01)

7. Review of Plant Operations (Units 1 and 2)

A. Plant Safety Committee Activities

The NRC inspector observed a routine, weekly meeting of the licensee's Plant Safety Committee (PSC) conducted on June 16, 1982. The inspector verified that the attendees met the quorum requirements of Unit 1 and 2 Technical Specification 6.5.1.5, and that the PSC meeting frequency requirements of Unit 1 and 2 Technical Specification 6.5.1.4 were satisfied. Additionally, the NRC inspector verified that the PSC meeting agenda covered the applicable areas of PSC responsibility defined by Unit 1 and 2 Technical Specification 6.5.1.6.

The NRC inspector selected a potentially reportable event that occurred on January 11, 1982, and was reported to the PSC by a licensee form No. 1000.08A, "Report of Abnormal Conditions," in order to determine if the final resolution of this event was consistent with that which was reported in the PSC meeting minutes. The inspector verified that

the corrective action approved by the PSC was completed and documented on the PSC commitment tracking system. The event was determined by the PSC not to be reportable to the NRC, and the meeting minutes were documented accordingly.

The NRC inspector also followed up on two procedure changes that were rejected by the PSC during the meeting on June 16, 1982, and verified that corrections were made to the procedure changes as required by the PSC prior to final approval.

B. QA Audits

The NRC inspector reviewed the following licensee QA audit reports and associated audit finding reports (AFR's) to verify that the overall audit program has been implemented in accordance with the Quality Assurance Manual for Operations (Arkansas Power and Light Company TOP-1A, Rev. 5) and Unit 1 and 2 Technical Specification 6.5.2.

<u>Audit</u>	<u>Period of Audit</u>	<u>Date Report Issued</u>
Operating Plant Surveillance Audit-Chemistry (QAP-22)	October 14, 1981- November 17, 1981	December 4, 1981
Operating Plant Surveillance Audit-Health Physics (QAP-3)	May 7, 1982 - June 21, 1982	July 7, 1982

Both of the above audits are required by Unit 1 and 2 Technical Specification 6.5.2.1 to be provided by the licensee's Safety Review Committee (SRC), but the SRC had delegated the actual performance of the audits to the licensee's onsite QA organization. The SRC then reviews the completed audit reports and corrective actions for AFR's as part of their routine meeting agenda. This involvement of the licensee's QA organization in the SRC audits required by Technical Specification 6.5.2.1 presents an apparent conflict with the requirements of Section 18.1.1 to the licensee's Quality Assurance Manual for Operations, and has been documented in a previous NRC Inspection Report as unresolved item 313/8118-04 and 368/8116-04. Licensee representatives have stated that an upcoming revision to the Quality Assurance Manual for Operations will modify the wording of section 18.1.1 to remove the present ambiguity.

The NRC inspector verified that the audits reviewed were performed by qualified personnel and that the personnel were independent of the organization audited. The inspector also verified that the corrective actions reported complete for audit QAP-22 were, in fact, completed as reported. Additionally, the NRC inspector verified that the audits

were being performed at the frequency required by Unit 1 and 2 Technical Specification 6.5.2.8.

C. Training

(1) Requalification Training

The NRC inspector attended two requalification training lectures for licensed operators and verified that lesson plan objectives were met and that the training was in accordance with the approved operator requalification program schedule and objectives.

(2) General Employee Training

The NRC inspector interviewed four licensee employees, including one that had been employed less than one year, to verify that the licensee's general employee training program is being implemented in accordance with Procedure 1023.07, "General Employee Training Program." This procedure requires that:

- . All employees receive security and emergency plan training prior to being allowed unescorted access to the protected area.
- . All employees receive QA/QC training and fire and industrial safety training within the first four months of employment.
- . All employees receive general employee plant system training within the first year of employment.
- . Annual retraining is required in the areas of security and emergency plan training, QA/QC training, and fire and industrial safety training.

The NRC inspector determined that the licensee's general employee training program was being adequately implemented in the case of the four persons interviewed. Additionally, the inspector verified that adequate training records were being maintained to document this required training.

(3) On-the-Job Training

The NRC inspector interviewed one mechanical maintenance helper, one electrical maintenance helper, and two instrumentation and controls technician helpers to verify that the licensee's on-the-job training program, as defined in Procedure 1063.05, was being properly implemented. In addition, the inspector

reviewed the training records for the above personnel to verify that the formal technical training requirements of Procedure 1063.09, "Instrumentation and Controls Training"; 1063.10, "Mechanical Maintenance Training Program"; and 1063.11, "Electrical Maintenance Training Program," were being met.

The NRC inspector determined that, for the personnel interviewed, the licensee's on-the-job training program was being properly implemented and documented. Further, it appeared to the inspector that this program had the strong support of the first-line and intermediate-level supervisors, and was being used by these supervisors as a basis for job assignments to their non-journeyman personnel. It seemed to be generally recognized that the viability of the on-the-job training program was essential in light of the significant number of new, inexperienced personnel recently hired into the maintenance organization, particularly in the areas of electrical maintenance and instrumentation and controls maintenance.

The NRC inspector verified, through a review of training records and discussions with the four maintenance personnel, that the licensee's formal technical training program was being implemented. The program varied for each maintenance area, but generally consisted of a multi-week classroom training session at a corporate skills training center, followed by on-going classroom and hands-on shop training at the site training facility.

(4) Security Officer Training

The NRC inspector observed one training lecture provided to physical security personnel and verified that lesson plan objectives and the lecture schedule were met.

D. Corrective Action

The NRC inspector reviewed the licensee's files of nonconformance reports (NCR's) and reports of abnormal conditions (RAC's) for the period of January through June, 1982. The NRC inspector found that problems were being identified, tracked, and resolved in accordance with Administrative Procedures 1000.07 and 1022.23.

No violations or deviations were identified.

8. Exit Interview

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