

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

Report Nos. 50-313/79-22
50-368/79-21

Docket No. 50-313 License No. DPR-51
50-368 NPF-6

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: October 6 - November 21, 1979

Inspector: W. D. Johnson 12/7/79
W. D. Johnson, Resident Reactor Inspector Date

Approved By: T. F. Westerman 12/7/79
T. F. Westerman, Chief, Reactor Projects Section Date

Inspection Summary

Inspection conducted during period of October 6 - November 21, 1979 (Report No. 50-313/79-22)

Areas Inspected: Routine, announced inspection of previously identified inspection items, plant operations, surveillance testing and calibration control program, and personnel qualification program. The inspection involved 69 inspector-hours on-site by the resident NRC inspector.

Results: Within the four areas inspected, one item of noncompliance was identified (infraction - control of combustibles, paragraph 5).

Inspection conducted during period of October 6 - November 21, 1979 (Report No. 50-368/79-21)

Areas Inspected: Routine, announced inspection of previously identified inspection items, plant operations, surveillance testing and calibration control program, and personnel qualification program. The inspection involved 74 inspector-hours on-site by the resident NRC inspector.

Results: Within the four areas inspected, two items of noncompliance were identified (infraction - failure to adhere to procedure, paragraph 6; and infraction - physical barrier, paragraph 10).

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DETAILS

1. Persons Contacted

Arkansas Power and Light Company Employees

J. P. O'Hanlon, ANO General Manager
G. H. Miller, Engineering & Technical Support Manager
B. A. Baker, Operations Superintendent
T. N. Cogburn, Nuclear Engineer
E. C. Ewing, Plant Engineering Superintendent
P. Jones, Maintenance Superintendent
B. A. Terwilliger, Operations and Maintenance Manager
F. Foster, Plant Administrative Manager
M. Stroud, Assistant Maintenance Superintendent
R. T. Elder, I&C Superintendent
J. McWilliams, Assistant Operations Superintendent
B. L. Beta, QA Engineer
J. Vandergrift, Training Supervisor
T. Green, Training Coordinator
D. Trimble, Licensing Manager
F. Boswell, Safety and Fire Prevention Coordinator
J. Albers, Planning and Scheduling Coordinator
J. W. Anderson, Acting QC Supervisor
D. D. Snellings, Technical Analysis Superintendent
R. Roderick, Human Resources Supervisor
J. N. Martin, Employee/Industrial Relations Coordinator
P. A. Kearney, Engineer
B. West, I&C Supervisor
J. Griffin, Manager, Nuclear Operations
L. Humphrey, Manager, Quality Assurance
D. Rueter, Director, Technical Environmental Services

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

2. Followup on Previously Identified Items

(Closed) Open Item (313/78-04-11): Submittal of a licensee change request to add snubbers to Technical Specification Table 3.16-1 and to change the "Especially Difficult to Remove" classification for certain snubbers.

The licensee submitted the requested Technical Specification change request in a letter dated October 22, 1979.

(Closed) Open Item (313/79-07-06): Inspection frequency for containment penetrations V-1 and V-2.

The inspection frequency for these penetrations has been increased. They are now being tested after each use.

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(Closed) Open Item (313/79-09-11): Upper north electrical penetration room door.

This door has been shut and is considered capable of properly sealing the penetration room.

(Closed) Open Item (313/79-09-13): Procedural specification of the desired hand switch positions for the High Pressure Injection Pumps.

Revision 7 (6/12/79) of Operating Procedure 1102.02 specifies that the hand switches should be placed in "Normal after Stop."

(Closed) Open Item (313/79-10-01): Delete reference to valve CV-6671 in Procedure 1202.23, Step 3.7.

This procedure change was accomplished by Revision 3, PC-3, which was issued on August 27, 1979.

(Closed) Open Item (313/79-10-02): Use of steam trap bypass valves in Procedure 1106.06.

A procedure change to include the use of both steam trap bypass valves in this procedure is not required.

(Closed) Open Item (313/79-12-01): Improvement of valve identification and tagging.

The licensee has completed system walk-downs to identify valves which were not properly identified, and has procured and attached brass valve identification tags. A similar effort for Unit 2 is nearing completion.

(Closed) Open Item (313/79-15-01): Revision of Hydraulic Shock Suppressor Visual Inspection Procedure 1304.84.

Revision 5 to this procedure was issued on October 8, 1979. This revision includes acceptance criteria, operability statements, an improved data sheet, and assignment of responsibility for reviewing inspection findings.

(Closed) Open Item (313/79-15-02): Snubber discrepancies.

The discrepancies noted in this open item have been corrected.

(Closed) Open Item (313/79-15-03): Fire Detection System trouble tickets.

The licensee has raised the priority assigned to maintenance involving the Fire Detection System.

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(Closed) Open Item (368/79-09-03): Procedure revision to make Procedures 2102.02 and 2102.03 consistent in the specified position of the hand switch for the third High Pressure Injection pump.

Revision 0, PC-7 to 2102.03 was issued on September 18, 1979. This procedure now leaves the third HPI pump hand switch in "Pull to Lock."

(Closed) Item of Noncompliance (368/79-10-03): Mispositioning of valve 2SI-5091-3.

The licensee's corrective action to prevent recurrence of this item is acceptable.

(Closed) Item of Noncompliance (368/79-10-04): Failure to retain surveillance record.

The licensee has taken appropriate corrective action for this item.

(Open) Item of Noncompliance (Infraction 2 - Unit 2, Inspection Report 368/78-28): Failure to maintain surveillance test control charts current.

The licensee's supplemental response to this item was provided in a letter dated March 15, 1979. This letter stated that the method for scheduling surveillance tests would be changed to a central schedule point by September 1, 1979. This action had not yet been completed at the time of this inspection. The inspector requested the licensee to provide another supplemental response to this item. (Refer to paragraph 3 of this report for additional information on this item.)

3. Surveillance Testing and Calibration Control Program (Units 1 & 2)

The inspector reviewed the licensee's surveillance testing and calibration control programs in order to ascertain that these programs include the following elements.

- . Master schedule established, including:
 - a. Frequency for each test/calibration/inspection
 - b. Plant group responsible for performing each test/calibration/inspection
 - c. Surveillance test status
- . Responsibility assigned in writing to maintain the master surveillance/calibration/inspection schedule up-to-date.
- . Formal requirements established for conducting surveillance tests, calibrations, and inspections in accordance with approved procedures which include acceptance criteria.

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- Formal methods and responsibilities defined for review and evaluation of surveillance test/calibration data including procedures for reporting deficiencies, failures, malfunctions, etc., identified during the tests/calibrations or inspections with required verification that LCO requirements were satisfied.
- Responsibility assigned for assuring that required schedules for all tests/calibrations/inspections are satisfied.

In inspection report 368/78-28, the licensee was cited for failure to keep the test control charts current. The corrective action for this item included changing the method of scheduling surveillance tests to a central control point. As was pointed out in paragraph 2 of this report, this action has not yet been completed. The administrative procedure describing the revised system has not yet been issued. The surveillance testing which is assigned to Technical Support, Nuclear Engineer, and Safety and Fire Protection Coordinator, have not yet been included in the central scheduling system. The item of noncompliance from inspection report 368/78-28 remains open pending completion of these items.

No items of noncompliance or deviations were identified.

4. Personnel Qualification Program (Units 1 & 2)

The inspector verified that the licensee has established in writing the minimum educational, experience or qualification requirements for the following types of positions:

- Principal Operating Staff
- First Level Supervisors
- Onsite Technical Engineering Staff
- Plant Craftsmen
- Plant Operators
- Plant Chemistry Technicians
- Receipt Inspection Personnel
- Quality Assurance Supervisory Positions
- Safety Review Committee Members

The licensee's requirements for the above positions are found in the Summary of Position Impact Book, FSAR, Technical Specifications (referring to ANSI N18.1, 1971), QC Procedure 1004.20, the Quality Assurance Manual, and the SRC Charter.

The licensee's FSAR's and Technical Specifications require that personnel meet the qualification requirements of ANSI N18.1, 1971. The inspector noted that many of the qualification requirements stated in the Summary of Position Impact Book are stated in more general terms than those in ANSI N18.1, 1971. Thus, using the Summary of Position Impact Book as a guide, there would be no assurance that the specific requirements of ANSI N18.1, 1971, would be met. A similar problem was noted comparing the Summary of Position Impact Book to the Quality Assurance Manual

qualification requirements for Quality Assurance personnel. The licensee currently has an effort underway to revise the Position Impact Summaries. When this effort is completed, the stated qualification requirements should meet or exceed those stated in ANSI N18.1, 1971, and in the Quality Assurance Manual. (Open Item 313/79-22-02; 368/79-21-03)

The inspector also sought to verify that responsibilities have been assigned in writing to assure that the minimum educational, experience, or qualification requirements will be satisfied for personnel in the job positions mentioned above. At the time of this inspection, such responsibility had not been assigned in writing. A new procedure, Employment and Placement, is being developed by the licensee. This procedure is expected to include assignment of this responsibility. (Open Item 313/79-22-03; 368/79-21-04)

5. Review of Plant Operations (Unit 1)

The inspector toured accessible areas of the plant. Conditions observed were in compliance with the Technical Specifications and licensee administrative procedures with the exception of corridor 98 on elevation 372'.

ANO Administrative Procedure 1005.17, Control of Combustibles, prohibits storage of flammable liquids and other combustible materials in corridor 98, elevation 372' in the Unit 1 Auxiliary Building. On October 29, 1979, the inspector observed that this area contained a barrel half full of miscellaneous combustible trash and a one gallon safety can containing solvent. These items were removed by the Safety and Fire Prevention Coordinator upon notification by the inspector. This is an apparent item of noncompliance with Technical Specification 6.8.1 which requires that written procedures shall be established, implemented, and maintained covering the activities associated with Fire Protection Program implementation. (313/79-22-01)

As corrective action to prevent recurrence of this item, the licensee's maintenance contractor has initiated a control system for the issuance, use and return of acetone. Additional attention is also being given to cleanliness and housekeeping, with emphasis on cleaning up a work area upon job completion.

6. Review of Plant Operations (Unit 2)

The inspector reviewed a sample of the Unit 2 shift logs and operating records. This review included the items listed below.

Control Room Log - September, October
Shutdown Log - October
CPC/CEAC Auto Restart and Sensor Failure Log - August, September
Power Distribution and Burnup Log - September

Daily Shift Containment Sump Discharge Log -
August, September
CEA Position Log - September
Switchboard Log - September
Waste Control Operator's Log - September
Auxiliary Operator's Log - September
Auxiliary Operator's Outside Log - September
Jumper and Bypass Log - Current Entries

It was not clear to the inspector that the requirement of Technical Specification Table 4.3-1, Note 2, concerning adjusting CPC Delta-T power, CPC nuclear power and linear power when these indications are greater than 2% different from calorimetric power was being met. This item is considered unresolved pending further inspector review and discussions with licensee representatives. (Unresolved Item 368/79-21-05)

The Delta-T Sigma Weather Station (Recorder TR 9300) normally records the temperature difference between two elevations on the meteorological tower with the blue pen. A review of the recorder chart indicated that the blue pen was malfunctioning (drawing a constant value straight line) from about 2255 hours on October 16, 1979, through about 1015 hours on October 18, 1979. Table 4.3-5 of the Unit 2 Technical Specifications requires that a daily channel check be performed on the Air Temperature - Delta-T instrument. Documentation of this channel check is provided by recording the chart reading on the Shutdown Log (Modes 5 & 6) during the 0000-0800 shift daily. The log entry on October 17, 1979 was "Stable + .7". The entry on October 18, 1979 was "S". During this time, the recorder was showing the abnormal characteristic of recording a constant value of + 0.7. No trouble reports were initiated during this time period for this instrument.

Section 3.2 of QCP 1004.02, Initiating and Processing of Trouble Reports, states, "AP&L personnel are responsible for reporting all incidents, malfunctions, failures, abnormalities, discrepancies or other conditions which do not conform to operating requirements."

The licensee's failure to perform a meaningful channel check on this instrument led to failure to report the recorder failure as required by QCP 1004.02. This is an apparent item of noncompliance. (368/79-21-01)

As corrective action to prevent recurrence of this item, the Operations Superintendent sent a memorandum to all licensed operators. This memo stressed the importance of the Delta-T Recorder in calculating off-site concentrations following releases of gaseous radioactivity. It pointed out the requirement for a daily channel check of the instrument and specified that this check is to be made by Unit 2 operators. The memo also gave guidance on the method and objective of this channel check.

The inspector toured accessible areas of the plant. Conditions observed were in compliance with the Technical Specifications and licensee administrative procedures with the exception of door number 205 on elevation 317'. Refer to paragraph 10 of this report.

7. Operating Procedure for Fire Detection and Suppression System (Units 1 and 2)

The inspector observed that additional instructions for local operator action, such as manual initiation of fire protection systems and annunciator response, should be added to the existing Fire Detection and Suppression System Procedures. The Unit 1 Assistant Operations Superintendent informed the inspector that such a procedure was in preparation. This item will remain open pending approval and issuance of the procedure. (Open Item 313/79-22-04; 368/79-21-06)

8. 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. An unresolved item disclosed during the inspection is discussed in paragraph 6.

9. Exit Interviews

The inspector 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 inspector summarized the scope of the inspection and the findings.