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

IE Inspection Report No. 50-313/75-07

Docket No. 50-313

Licensee:

Arkansas Power & Light Company

License No: DPR-51

Sixth & Pine Streets Pine Bluff, Arkansas

Category C

Facility:

Arkansas Nuclear One, Unit 1

Location:

Russellville, Arkansas

Type of License:

B&W, PWR, 2568 Mwt

Type of Inspection: Routine, Unannounced

Dates of Inspection: July 21-24, 1975

Dates of Previous Inspection: June 25-27, 1975

Principal Inspector:

Smith, Reactor Inspector

Reviewed by: 115 Mackey.

G. L. Madsen, Chief, Reactor Construction and .

Operations Branch

#### SUMMARY OF FINDINGS

# I. Enforcement Action

# A. Violations

None identified by the inspector.

#### B. Infractions

# 1. Fire Stops Design Control

Contrary to Criterion III, 10 CFR Appendix B, a design change for fabricating fire stops was accomplished without review and approval. (DETAILS, paragraph 5)

# C. Deficiencies

# 1. Reporting Requirements

Contrary to Technical Specification, Appendix B, Section 5.6.2, paragraph C, two environmental occurrences were not reported within the specified time interval. (DETAILS, paragraph 9)

# Training of Maintenance Personnel

Contrary to Technical Specification, Section 6.3, a training program and schedule was not established for maintenance personnel. (DETAILS, paragraph 8)

# II. Licensee Action on Previously Identified Enforcement Matters

None outstanding.

#### III. Design Changes

Not inspected.

#### IV. Unusual Occurrences

The licensee reported Environmental Occurrence Number 50-313/75-41 to the inspector on 7/22/75. This occurrence was noted on 7/21/75 and was related to a minor discharge of amonia in the circulating water from the plant. This discharge was accompanied by a slight increase in pH. The licensee representative indicated that the followup reports would be submitted as required.

The licensee was also notified that contrary to section 5.6.2.c of the Environmental Technical Specifications for ANO-1, two environmental occurrence reports EO 31 and 32, and EO 34 and 35 were not submitted within the one week required period. The licensee was notified that this item of noncompliance would be handled as a deficiency.

# V. Other Significant Findings

#### A. Unresolved Item

# 7507-1 Training

Failure to train operational personnel in quality assurance. (DETAILS, paragraph 7)

# B. Status of Previously Reported Unresolved Items

#### 74-11/1 Control Room Ventilation System

Test Procedure (TP) 351.30 demonstrates the ability of the control room emergency air conditioning units to perform their design function of providing an adequate supply of temperature controlled air to the control room and the computer room. Items 9, 10, and 11 of the test deficiency record were completed on 6/27/75. Final review of all acceptance criteria for TP 351.30 was completed on 7/22/75.

This item is closed.

#### 75-2/2 Halon Fire System Test Acceptance

AP&L/Nuclear Services (Little Rock) has contracted with Cardox Company to assist ANO-1 representatives in the testing of the Halon Fire System to meet the acceptance criteria. The licensee indicated that this test will be completed by 8/31/75.

This item remains open pending review of the test.

#### 75-2/1 Sodium Thiosulfate Tank Dilution

The recirculation pump for the sodium thiosulfate tank is on order and is scheduled for delivery in the fall, 1975.

This item is open pending installation and satisfactory operation of the system.

# 75-2/6 Switch Yard Batteries Surveillance Records

The licensee indicated that they are still trying to obtain these records from the Relay and Communication Department (AP&L).

This item remains open pending review of these records.

# 75-4/2 Fire Stop Inspection

The licensee was not able to produce records of the review of changes to the drawings for fire stop installation. The inspector notified the licensee that this item will be handled as an item of noncompliance (infraction). (See DETAILS 5)

This item is considered closed.

# VI. Management Exit Interview

On July 23, 1975, a meeting was held with plant personnel to identify the scope of the inspection and to summarize the findings of the inspection. The following individuals were in attendance:

- J. W. Anderson, Jr., Plant Superintendent
- G. H. Miller, Assistant Plant Superintendent
- B. A. Terwilliger, Supervisor, Plant Operations Humphrey, Quality Assurance Supervisor
- D. Trimble, Training Coordinator
- J. L. Orlicek, Quality Control Engineer
- T. Green, Training Assistant

The inspector described the scope of the inspection and the findings. The significant items are given below:

- 1. Scope of Inspection
- Apparent items of noncompliance. The inspector discussed the infraction and deficiencies summarized above.
- 3. Unresolved Items
- 4. Plant Operations
- 5. Abnormal Occurrences
- 6. Unusual Events
- 7. IE Bulletin 75-04A

#### DETAILS

# 1. Persons Contacted

#### Arkansas Power & Light Company (AP&L)

- J. W. Anderson, Jr., Plant Superintendent
- G. H. Miller, Assistant Plant Superintendent
- B. A. Terwilliger, Supervisor of Plant Operations
- J. Robertson, Assistant Supervisor of Plant Operations
- B. A. Baker, Assistant Supervisor of Plant Operations
- J. L. Orlicek, Quality Control Engineer
- T. Templeman, Plant Operator
- T. Cogburn, Nuclear Engineer
- J. Lowman, Senior Instrument Technician
- D. Trimble, Training Coordinator
- N. A. Moore, Manager, Quality Assurance
- R. T. Elder, Assistant Instrumentation Supervisor
- L. Humphrey, Operation & Construction QA Supervisor
- J. Crow, Store Room Supervisor

#### Bechtel Power & Industrial Division

- B. Matthews, Field Supervisor Engineer-Electrical
- D. Young, Level III Inspector
- W. Rush, Weld Records Coordinator

#### 2. Plant Status

The reactor was operating at 93% FP when the inspectors arrived on July 21, 1975. During the period of the inspection, the reactor tripped (7/23/75). The reactor tripped while making adjustments to the level controller in the feed heater. The adjustments caused the feed heater drain tank to have a low level, resulting in an automatic tripping of the heater drain pump and closing of drain tank cutlet valve. This loss of heater drains caused a feed pump to trip and a turbine run back. The turbine run back caused a primary pressure increase due to the lag of the reactor power behind the reduction in steam load. The operator opened the primary pressurizer spray valves and the resulting low pressure in the primary caused a variable low pressure trip. The reactor was then operated between hot shu'down and hot standby conditions for operator training while maint mance was being performed on the feedwater heater.

#### 3. Plant Operations

A. The shift logs and operating records were reviewed and the following items were verified by the inspector:

- (1) The control room log sheet entries, the shift supervisor's log, and the auxiliary logs were filled out and initialed as required.
- (2) Log sheet and logbook reviews are being conducted as required by the staff.
- (3) Operating or standing orders to the operating shift do not conflict with the Technical Specifications (TS).
- (4) The jumper and bypass log was in order and did not conflict with TS requirements or limiting conditions for operations (LCO).
- (5) No items of noncompliance were identified in the review (5) the Equipment Trouble Reports.
- B. A plant tour of accessible areas was conducted and the following observations were made:
  - (1) Plant process parameters were being monitored and recorded as required and were within TS requirements.
  - (2) Several safety related reactor control room annunciators in the alarm condition were examined and, through discussion with the operators, were determined to present no deviation from the TS requirements.
  - (3) The number of control room personnel on duty met the TS requirements.
  - (4) Radiation controls were properly established.
  - (5) Plant housekeeping conditions were in good order.
  - (5) During the plant tour, no significant fluid leaks, piping vibrations, nor inappropriate settings, etc., on pipe hangers or seismic restraints were noted.

# 4. Organizational Change

The licensee indicated that a slight change to the operation's organization has taken place. In particular, two new positions have been added at the operations level, both of which are designated as Assistant Supervisor of Plant Operations.

# 5. Fire Stop Inspection

The final report from Bechtel Power Corporation relating to the design and construction evaluation of fire stops at ANC-1 is not completed. The licensee could not produce reviewed changes for deviations to the "as installed" plant fire stop drawings 1/. The licensee was notified that this item will be handled as an item of noncompliance (infraction).

# 6. Quality Assurance Program

The Quality Assurance Manual for operations was approved by the Quality Assurance Branch, Division of Reactor Licensing, on May 12, 1975 and the manual was distributed July 11, 1975.

The purpose of the quality assurance inspection was to evaluate selective criterion of 10 CFR 50, Appendix B, and determine implementation of the Quality Assurance Manual for operation. Quality Assurance Organization, Quality Assurance Training, Procurement, and Auditing were reviewed during this inspection.

Organizational lines of responsibility were reviewed for independence of responsibility and actions.

Procurement was reviewed and three items were selected that were being stored in the Q warehouse. The procurement documents were reviewed for proper approval. Items in the hold area were reviewed for segregation and identification.

Selective audits conducted by the quality assurance organization were reviewed. A total of 68 audits have been conducted since the plant was licensed in April 1974. Fifteen of these audits were reviewed for identification of problems and corrective actions taken. The inspector had no additional questions in the quality assurance area reviewed except for the training of operational personnel in the quality assurance. This item is discussed in paragraph 7.

# 7. Training of Operations Personnel in Quality Assurance and Quality Control

Training of operational personnel has been completed in part and a program and schedule for training of all personnel has been promulgated. This training is scheduled to be accomplished in the third quarter of 1975 and initial indoctrination of supervisory personnel to start the week of July 28, 1975. This item is unresolved and will be inspected at a future time.

<sup>1/</sup> IE Inspection Report 50-313/75-04, Details 3, and IE Inspection Report 50-313/75-05, Details 2.

# 8. Maintenance Activities

The inspector reviewed quality assurance records to verify that maintenance was accomplished by qualified and trained personnel. This review consisted of a review of the maintenance technician's training records.

A review was also conducted on quality records such as radiographs, welder qualification, weld filler material control, and drawing controls associated with the repairs to the core spray pump suction line which had hair line cracks in the pipe. This problem was previously documented by inspection report 74-14, item 7. The inspector had no additional questions in this area.

In reviewing the training records of the maintenance technicians, the inspector determined that a schedule and program did not exist as required by ANSI 18.1, paragraph 5.1, which states in part that a training program and schedule shall be established for each nuclear power plant to initially develop and maintain an organization fully qualified to be responsible for operation, maintenance and technical aspects of the nuclear power plant involved. Technical Specification paragraph 6.3, states in part that minimum qualifications, training, replacement training, and retraining of plant personnel shall be in accordance with that stated in the Standard for Selection and Training of Personnel for Nuclear Power Plants, ANSI 18.1 - 1971.

# 9. Environmental Occurrences (EO)

The inspector noted that a total of 40 environmental occurrences have been reported thus far in 1975. It was also noted that contrary to section 5.6.2.c of the Environmental Technical Specifications, EO #31 and 32, and EO #34 and 35 were not followed by a written report within the required one week period.

				Occurrence Date	Report Date
EO	#31	and	32	5/27/75	6/9/75
EO	#34	and	35	6/9/75	6/19/75

The licensee indicated that efforts would be made to submit those reports within the time frame which is required.