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

Reports: 50-313/81-16
50-368/81-13

Dockets: 50-313
50-368

Licenses: DPR-51
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: April 21-24, 1981

Inspectors: D M Hunnicutt 5/13/81
D. M. Hunnicutt, Chief Date
Project Section 2

for D M Hunnicutt 5/13/81
L. A. Yandell, Reactor Inspector Date
Project Section 2

Approved by: D M Hunnicutt 5/13/81
D. M. Hunnicutt, Chief Date
Project Section 2

Inspection Summary

Inspection conducted during the period of April 21-24, 1981
(Report 50-313/81-16)

Area Inspected: Routine, unannounced inspection of the Reactor Cooling System Leak Rates (RCSLR) to independently verify that the RCSLR are within the Limiting Condition for Operation (LCO) and that the licensee's calculational technique for determining RCSLR is adequate. The inspection involved 14 inspector hours on-site by one NRC inspector.

Results: The RCSLR was determined to be within the Technical Specification limits, met the LCO requirements, and the difference between the licensee's and the inspector's calculational techniques and calculated leak rate values are acceptable. Within the one area inspected, no violations or deviations were identified.

Inspection conducted during the period of April 21-24, 1981
(Report 50-368/81-13)

Area Inspected: Routine, unannounced inspection of the refueling activities. The inspection involved 27 inspector hours on-site by two NRC inspectors.

Results: Within the one area inspected, no violations or deviations were identified.

## DETAILS

1. Persons Contacted

*J. P. O'Hanlon, ANO General Manager
*G. H. Miller, Engineering & Technical Support Manager
*E. L. Sanders, Maintenance Manager
*L. W. Schempp, Quality Control Manager
*B. A. Terwilliger, Operations Assessment Superintendent
*L. W. Humphrey, Administration Manager
*L. A. Taylor, Unit 2 Operations Superintendent
W. Mocn, Shift Supervisor, Unit 1

*Attended exit interview.

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

2. Refueling Activities (Unit 2)

The inspectors reviewed the refueling activities being performed during this period as well as the documentation associated with the preparation and verifications required for refueling operations. The inspectors verified that (1) all surveillance testing required by Technical Specifications had been performed prior to fuel handling, (2) periodic testing of refueling related equipment was being performed, (3) required parameters were being monitored in accordance with Technical Specifications, and (4) staffing for refueling operations was in accordance with Technical Specification requirements.

As part of the review, the inspectors reviewed the following licensee documents:

Procedure 2304.70, "Containment Isolation and Miscellaneous Valves Stroke Test and Positicn Verification," (Revision 1, dated March 20, 1981)

Procedure 2503.03, "Operation of Fuel Handling Equipment," (Revision 3, dated April 17, 1981)

Procedure 2502.03, "Preparation for Refueling (Revision 4, dated April 15, 1981)

Procedure 2502.01, "Refueling Shuffle (Revision 1 dated April 14, 1981)

The inspector identified four minor administrative discrepancies in the completed Procedure 2502.03 which the licensee corrected prior to the inspector leaving the site.

The inspectors observed refueling operations from the Refueling Machine in containment and at the control station in the Control Room. In addition, the licensee demonstrated operation of the Spent Fuel Handling Machine for the inspectors since fuel was not being transferred from the containment at that time.

No violations or deviations were identified.

3. Independent Measurement of Reactor Coolant System Leak Rate (RCSLR) Unit 1

The inspector independently verified that the RCSLR for the Unit 1 RCS was within the Limiting Conditions for Operation (LCO) and that the licensee's calculational technique for determining the RCSLR was adequate.

The licensee's calculational technique and the inspector's independent results were compared. The licensee's identified and unidentified RCSLR were: (1) Total Leakage = 0.5098 gallons per minute (gpm); (2) Known Leakage = 0.286 gpm; and (3) Unknown Leakage = 0.224 gpm. The results of the inspector's independent measurements were: (1) Total Leakage = 0.594 gpm; (2) Known Leakage = 0.286 gpm; and (3) Unknown Leakage = 0.308 gpm. The RCSLR difference between the licensee's total leakage calculations and the inspector's independent calculations was 0.084 gpm. The inspector determined that the RCSLR was within the Technical Specification limits and the difference between the licensee's and the inspector's results was acceptable.

No violations or deviations were identified.

4. Exit Interview

An exit interview was conducted on April 24, 1981, with those ANO personnel denoted in paragraph 1 of this report to summarize the scope of the inspection and the findings.