



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER AND LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT 1

DOCKET NO. 50-313

Introduction

By letter dated February 29, 1984, as resubmitted and revised by letter dated August 15, 1984, Arkansas Power and Light Company (AP&L or the licensee) requested amendment of the Technical Specifications (TSs), Appendix A, appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit 1 (ANO-1). The proposed change would require additional operating restrictions and testing of the Low Temperature Overpressure Protection (LTOP) System. Specifically, the proposed amendment would require (1) the core flood tank discharge valves be closed and the circuit breaker for the motor operators be opened before depressurizing the reactor coolant system (RCS) below 600 psig, (2) the four high pressure injection motor-operated valves be closed with their opening control circuits for motor operators disabled when the RCS is less than 280°F, (3) the plant not be operated in a water-solid condition when the RCS pressure boundary is intact except as allowed by Emergency Operating Procedures or during system hydrotest, (4) surveillance of the LTOP alarm logic and (5) the power operated relief valve be exercised at the end of each refueling outage.

Discussion

As a result of our review of the LTOP system in ANO-1, we requested by letter dated November 4, 1983, that the licensee develop TSs for this system. The licensee has proposed all of our requested TSs except one which would require that the LTOP system be enabled when the RCS temperature is below 280°F. We have discussed this with the licensee's staff who have indicated that the LTOP system is manually enabled because the plant operating procedures call for manual enabling and, if the system is not enabled, an alarm will sound in the control room. We have verified this through review of Plant Operating Procedure 1102.10, Section 8, "Depressurization and Cooldown of the RCS for Refueling/Maintenance." Step 8.2.33 requires:

When RCS temperature is less than 350°F but greater than 280°F, verify RCS pressure is less than 475 psig and place HS 1013 in 525 psig position.

A. Close HPI valves CV1219, CV1220, CV1227 & CV1228 and open respective breakers.

We have also confirmed that an alarm will sound in the control room if the above procedure is not performed when required.

### Evaluation

With the verification of the procedure to enable the LTOP system when the RCS is below 280°F and the sounding of an alarm in the control room if the LTOP is not enabled as required by the procedure, we find that the proposed TSs for LTOP in ANO-1 are adequate for meeting General Design Criteria 15 & 31 and are, therefore, acceptable.

### Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### Conclusion

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 4, 1935

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