March 4, 1985

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Docket No. 50-313

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Mr. John M. Griffin
Senior Vice President
of Energy Supply
Arkansas Power and Light Company
P. O. Box 551

Dear Mr. Griffin:

The Commission has issued the enclosed Amendment No. 95 to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit No. 1 (ANO-1). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated August 15, 1984.

The amendment provides additional TSs for ANO-1 which require operating restrictions and testing of the Low Temperature Overpressure Protection System.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next Monthly Notice.

Sincerely,

"ORIGINAL SIGNED BY:"

Guy S. Vissing, Project Manager
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 95 to DPR-51
2. Safety Evaluation

cc w/enclosures:
See next page

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cc w/enclosure(s):

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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95
License No. DPR-51

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Arkansas Power and Light Company (the licensee) dated August 15, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR-51 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 4, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 95

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove	Insert
18a	18a
20	20
72d	72d
73b	73b

3.1.2.7 Prior to reaching fifteen effective full power years of operation, Figures 3.1.2-1, 3.1.2-2 and 3.1.2-3 shall be updated for the next service period in accordance with 10CFR50, Appendix G, Section V.B. The service period shall be of sufficient duration to permit the scheduled evaluation of a portion of the surveillance data scheduled in accordance with Specification 4.2.7. The highest predicted adjusted reference temperature of all the beltline region materials shall be used to determine the adjusted reference temperature at the end of the service period. The basis for this prediction shall be submitted for NRC staff review in accordance with Specification 3.1.2.8. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

3.1.2.8 The updated proposed technical specifications referred to in 3.1.2.7 shall be submitted for NRC review at least 90 days prior to the end of the service period. Appropriate additional NRC review time shall be allowed for proposed technical specifications submitted in accordance with 10 CFR Part 50, Appendix G, Section V.C.

3.1.2.9 With the exception of ASME Section XI testing and when the core flood tank is depressurized, during a plant cooldown the core flood tank discharge valves shall be closed and the circuit breakers for the motor operators opened before depressurizing the reactor coolant system below 600 psig.

3.1.2.10 With the exception of ASME Section XI testing, fill and vent of the reactor coolant system, and to allow maintenance of the valves, when the reactor coolant temperature is less than 280°F the four High Pressure Injection motor operated valves shall be closed with their opening control circuits for the motor operators disabled.

3.1.2.11 The plant shall not be operated in a water solid condition when the RCS pressure boundary is intact except as allowed by Emergency Operating Procedures and during System Hydrotest.

The heatup and cooldown rates stated in this specification are intended as the maximum changes in temperature in one direction in a one hour period. The actual temperature linear ramp rate may exceed the stated limits for a time period provided that the maximum total temperature difference does not exceed the limit and that a temperature hold is observed to prevent the total temperature difference from exceeding the limit for the one hour period.

Specification 3.1.2.9 is to ensure that the core flood tanks are not the source for pressurizing the reactor coolant system when in cold shutdown.

Specification 3.1.2.10 is to ensure that high pressure injection is not the source of pressurizing the reactor coolant system when in cold shutdown.

Specification 3.1.2.11 is to ensure that the reactor coolant system is not operated in a manner which would allow overpressurization due to a temperature transient.

REFERENCES

(1) FSAR, Section 4.1.2.4

(2) ASME Boiler and Pressure Code, Section III, N-415

(3) FSAR, Section 4.3.11.5

(4) BAW-1440

(5) BAW-1698

(6) BAW-1547, Revision 1

(7) BAW-1511P

(8) BAW-1436

TABLE 4.1-1 (Cont'd)

Channel Description	Check	Test	Calibrate	Remarks
d. SG A high range level high-high	S	M	R	
e. SG B high range level high-high	S	M	R	
57. Containment High Range Radiation Monitors	D	M	R	
58. Containment Pressure-High	M	NA	R	
59. Containment Water Level-Wide Range	M	NA	R	
60. Low Temperature Overpressure Protection Alarm Logic	NA	R	R	

Note:
S-Each Shift
W-Weekly
M-Monthly
D-Daily
T/W-Twice per Week
Q-Quarterly
P-Prior to each startup if not done previous week
B/M-Every 2 Months
R-Once every 18 months
PC-Prior to going Critical if not done within previous 31 days
NA-Not applicable

TABLE 4.1-2 (Continued)

Minimum Equipment Test Frequency

Item	Test	Frequency
16. RCS Vent Paths	Demonstrate operability by flow verification	At least once per 18 months during cold shutdown
17. PORV	Exercise	End of each refueling outage

Amendment No. 94, 95

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, 1985

Principal Contributor: Guy Vissing