May 23, 1989

Docket No. 50-368

Mr. T. Gene Campbell
Vice President, Nuclear
Operations
Arkansas Power and Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Campbell:

SUBJECT: ISSUANCE OF AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. NPF-6 - ARKANSAS NUCLEAR ONE, UNIT NO. 2 (TAC NO. 72891)

The Commission has issued the enclosed Amendment No. 95 to Facility Operating License No. NPF-6 for the Arkansas Nuclear One, Unit No. 2 (ANO-2). This amendment consist of changes to the Technical Specifications (TS) in response to your application dated December 12, 1986.

The amendment changes the ANO-2 TS which describe the design features of the Spent Fuel Storage Pool. The changes update the TS to conform with Operating License Amendment No. 43 which increased the spent fuel storage capacity for the plant.

A copy of our related Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

/s/

Chester Poslusny, Jr., Project Manager
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 95 to NPF-6
2. Safety Evaluation

cc w/enclosures:
See next page

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LTR NAME: ANO2 TAC NO 72891

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

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Office of Nuclear Reactor Regulation

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See next page

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County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

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

May 23, 1989

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95
License No. NPF-6

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

   A. The application for amendment by Arkansas Power and Light Company (the licensee) dated December 12, 1986, 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, as amended, 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 license 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. NPF-6 is hereby amended to read as follows:

   2. 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. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 23, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 95

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Revise the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

REMOVE PAGE	INSERT PAGE
5-5	5-5

VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 10,295 ± 400 cubic feet at a nominal T_{avg} of 545°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

5.6 FUEL STORAGE

CRITICALITY - SPENT FUEL

5.6.1.1 The spent fuel racks are designed and shall be maintained so that the calculated effective multiplication factor is no greater than 0.95 (including all known uncertainties) when the pool is flooded with unborated water.

CRITICALITY - NEW FUEL

5.6.1.2 The new fuel storage racks are designed and shall be maintained with a nominal 25.0 inch center-to-center distance between new fuel assemblies such that K_{eff} will not exceed 0.98 when fuel having a maximum enrichment of 4.1 weight percent U-235 is in place and aqueous foam moderation is assumed and k_{eff} will not exceed 0.95 when the storage area is flooded with unborated water. The calculated k_{eff} includes a conservative allowance of 2.1% $\Delta k/k$ for uncertainties.

DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 399' 10½".

CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 988 fuel assemblies.

5.7 COMPONENT CYCLIC OR TRANSIENT LIMITS

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

TABLE 5.7-1

COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT
Reactor Coolant System	500 system heatup and cooldown cycles at rates $\leq$ 100°F/hr.	Heatup cycle - T_{avg} from $\leq$ 200°F to $\geq$ 545°F; cooldown cycle - T_{avg} from $\geq$ 545°F to $\leq$ 200°F.
	500 pressurizer heatup and cooldown cycles at rates $\leq$ 200°F/hr.	Heatup cycle - Pressurizer temperature from $\leq$ 200°F to $\geq$ 653°F; cooldown cycle - Pressurizer temperature from $\geq$ 653°F to $\leq$ 200°F.
	10 hydrostatic testing cycles.	RCS pressurized to 3110 psig with RCS temperature $\geq$ 60°F above the most limiting components' NDTT value.
	200 leak testing cycles.	RCS pressured to 2250 psia with RCS temperature greater than minimum for hydrostatic testing, but less than minimum RCS temperature for criticality.
	400 reactor trip cycles.	Trip from 100% of RATED THERMAL POWER.
	40 turbine trip cycles with delayed reactor trip.	Turbine trip (total load rejection) from 100% of RATED THERMAL POWER followed by resulting reactor trip.
	200 seismic stress cycles.	Subjection to a seismic event equal to one half the design basis earthquake (DBE).

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

May 23, 1989

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 95 TO

FACILITY OPERATING LICENSE NO. NPF-6

ARKANSAS POWER AND LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT NO. 2

DOCKET NO. 50-368

INTRODUCTION

By letter dated December 12, 1988, Arkansas Power and Light Company (AP&L or the licensee) requested amendments to the Technical Specifications (TSs) appended to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit 2 (ANO-2). The proposed amendment would change Sections 5.6.1.1 and 5.6.3 of the ANO-2 TSs to modify the design description of the Spent Fuel Storage Pool and to indicate the increase in the storage capacity.

BACKGROUND

AP&L requested an amendment to change the design specifications for the ANO-2 Spent Fuel Storage Pool in a letter dated February 17, 1983. The Commission evaluated the amendment request and subsequently issued a safety evaluation and Amendment No. 43 on April 15, 1983. That amendment modified the provisions in ANO-2 Technical Specifications to permit modifications in the Spent Fuel Pool design to increase fuel storage capacity from 485 spaces to 988 spaces. This expansion was accomplished by replacing the existing fuel storage racks with high density storage racks.

EVALUATION

The proposed changes to the ANO-2 Technical Specifications are administrative in nature in that they update the design description of the spent fuel pool storage racks and the fuel assembly capacity of the spent fuel storage pool. Modification of the spent fuel pool storage racks was approved by the staff with the issuance of Amendment No. 43 on April 15, 1983. The licensee should have submitted these proposed changes to the TS design description as part of the original request in 1983, but failed to do so because of an administrative oversight. These changes do not introduce the possibility for an accident or malfunction of a different type than evaluated previously in the final safety analysis report (FSAR). Section 15.1.23, FUEL HANDLING ACCIDENT, of the FSAR states that "the design of the spent fuel storage racks... is such that fuel will always be in a subcritical geometrical array, assuming zero boron concentration in the fuel pool water." The staff found in their evaluation of the changes approved by Amendment No. 43, that this statement would remain valid with the proposed high density spent fuel storage racks. Simply updating the design description of the storage racks in the Design Features section of the TS does not change the staff's previous conclusion on the acceptability of the

present design. Regarding the increase in the spent fuel storage capacity, this was also previously approved by the staff. Amendment No. 43 changed TS Figure 3.9.1 which defines the allowed arrangement of fuel assemblies in the spent fuel pool. A total of 988 locations for fuel assemblies are depicted in this Figure. The licensee has proposed 988 as the limit on fuel pool capacity in TS 5.6.3, which is the same number previously accepted by the staff. Based on the above, the staff concludes that the proposed changes, which are purely administrative in nature, and introduce no new requirements or reduce existing requirements are acceptable.

ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(10), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

CONCLUSION

The staff has 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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 23, 1989

Principal Contributors: C. Poslusny
C. Harbuck