Docket No. 50-368

Mr. T. Gene Campbell Vice President, Nuclear Operations Arkansas Power and Light Company Post Office Box 551 Little Rock, Arkansas 72203 DISTRIBUTION
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ACRS (10)
TBarnhart (4)
OGC-WF
EJordan

CHarback

Dear Mr. Deddens:

SUBJECT: ISSUANCE OF AMENDMENT NO. 83 TO FACILITY OPERATING LICENSE NO. NPF-6 - ARKANSAS NUCLEAR ONE, UNIT NO. 2 (TAC NO. 66724)

The Commission has issued the enclosed Amendment No. 83 to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit No. 2 (ANO-2). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated November 30, 1987 (2CAN118702) and supplemented by letter dated March 7, 1988 (2CAN038803).

The amendment modifies the Technical Specifications to permit Arkansas Power and Light to render eight of the ten main steam safety valves inoperable and reset the remaining two valves in Mode 3 in order to carry out the 10 year hydrostatic test on the main steam system.

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

Sincerely,

/s/

George F. Dick, Jr., Project Manager Project Directorate - IV Division of Reactor Projects - III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

Amendment No. 83 to NPF-6

2. Safety Evaluation

cc w/enclosures: See next page

PD4/LAOW PNoonad 03/17/88 PD4XPM G.Dick:vh 03/77/88

EMTP/SC CYCheng 03/1/5/88

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PD4/D ///C JCalvo

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

April 6, 1988

Docket No. 50-318

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

Dear Mr. Campbell:

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George F. Dick, Jr. Project Manager

Project Directorate - IV

Division of Reactor Projects - III,

IV, V and Special Projects

Office of Nuclear Reactor Regulation

Enclosures:

Amendment No. 83 to NPF-6

2. Safety Evaluation

cc w/enclosures: See next page Mr. T. Gene Campbell Arkansas Power & Light Company

cc: Mr. J. Ted Enos, Manager Nuclear Engineering and Licensing Arkansas Power & Light Company P. O. Box 551 Little Rock, Arkansas 72203

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Arkansas Nuclear One, Unit 2

Mr. Charles B. Brinkman, Manager Washington Nuclear Operations C-E Power Systems 7910 Woodmont Avenue Suite 1310 Bethesda, Maryland 20814

Mr. Frank Wilson, Director
Division of Environmental Health
Protection
Department of Health
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72201

Honorable William Abernathy County Judge of Pope County Pope County Courthouse Russelville, Arkansas 72801



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

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 83 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 November 30, 1987 and supplemented on March 7, 1988, 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 car 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. NPF-6 is hereby amended to read as follows:
 - (2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specification contained in Appendices A and B, as revised through Amendment No. 83, 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

José G. Calo

Jose A. Calvo, 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: April 6, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 83

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace 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 areas of change.

<u>REMOVE</u> <u>INSERT</u> 3/4 7-1 3/4 7-1

3/4.7 PLANT SYSTEMS

3/4.7.1 TURBINE CYCLE

SAFETY VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.1 All main steam line code safety valves shall be OPERABLE with lift settings as specified in Table 3.7-5.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With both reactor coolant loops and associated steam generators in operation and with one or more main steam line code safety valves inoperable, operation in MODES 1, 2, and 3 may proceed provided, that within 4 hours, either the inoperable valve is restored to OPERABLE status or the Linear Power Level-High trip setpoint is reduced per Table 3.7-1; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one reactor coolant loop and associated steam generator in operation and with one or more main steam line code safety valves associated with the operating steam generator inoperable, operation in MODES 1, 2 and 3 may proceed provided:
 - 1. That at least 2 main steam line code safety valves on the non-operating steam generator are OPERABLE, and
 - 2. That within 4 hours, either the inoperable valve is restored to OPERABLE status or the Linear Power Level-High trip setpoint is reduced per Table 3.7-2; otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.1 No additional Surveillance Requirements other than those required by Specification 4.0.5.

*Except that during hydrostatic testing in Mode 3, eight of the main steam line code safety valves may be gagged and two (one on each header) may be reset for the duration of the test to allow the required pressure for the test to be attained. The Reactor Trip Breakers shall be open for the duration of the test.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 83 TO

FACILITY OPERATING LICENSE NO. NPF-6

ARKANSAS POWER AND LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT NO. 2

DOCKET NO. 50-368

1.0 INTRODUCTION

By letter dated November 30, 1987 (2CAN118702), Arkansas Power and Light Company (AP&L or the licensee) requested an amendment to the Technical Specifications (TSs) appended to Facility Operating License No. NPF-6 for Arkansas Nuclear One, Unit No. 2 (ANO-2). The proposed amendment would permit the licensee to render eight of the ten main steam code safety valves inoperable and reset the remaining two in Mode 3 so that the 10 year hydrostatic test on the main steam system may be performed. Supplemental information was submitted by licensee letter dated March 7, 1988 (2CAN038803). The supplemental information did not change the nature of the amendment application and thus did not affect the staff's proposed no significant hazards determination.

2.0 DISCUSSION

The licensee will be performing the 10 year hydrotest on the ANO-2 main steam system as required by Section XI of the ASME Boiler and Pressure Vessel Code. The test will be performed with the reactor in hot standby (Mode 3) using reactor coolant pump heat, and steam as the pressurizing medium.

The Inservice Inspection Program for ANO-2 is based on the 1974 Edition of Section XI of the ASME Code (The Code), through Summer 1975 Addendum, which requires Class 2 systems to be hydrostatically tested at 1.05 times the design pressure of the system if the test temperature is above 500°F. The main steam system is unisolated from the main steam code safety valves and the hydrostatic test pressure is higher than the set pressures of the main steam code safety valves. Therefore, to accomplish the test requirements, the licensee proposes to gag (render the valves such that they will not open) eight of the ten safety valves, reset two at a higher pressure than the test pressure, and utilize reactor coolant pump heat to produce steam as the pressurizing medium as allowed by the 1980 Edition of Section XI of the Code.

As presently written, ANO-2 Technical Specification 3/4.7.1.1 requires that all ten of the main steam line code safety valves be operable if the

8804140054 880406 PDR ADBCK 05000368 PDR reactor is at or above Mode 3. The proposed change would make an exception to this specification when the reactor is in Mode 3 and the secondary system hydrostatic test is being performed. Additionally, the proposed change would require that the reactor trip breakers be open for the duration of the hydrostatic test. This is intended to assure that adequate protection will be maintained for design basis events such as Uncontrolled Control Element Assembly (CEA) Withdrawal, CEA Ejection, and Main Steam Line Break (MSLB), by requiring that all CEAs are inserted in the reactor core and effectively preventing their withdrawal.

3.0 EVALUATION

The staff has reviewed the proposed changes to the hydrostatic test and the Technical Specification. The hydrostatic test will be performed in accordance with the requirements of the 1974 Edition of Section XI except that steam in lieu of water will be used to pressurize the secondary system. This is allowed in the later edition of the Code which has been approved by the Commission. The relieving capacity of the two relief valves is greater than the energy generated by decay heat and reactor coolant pump heat thereby providing overpressure protection in accordance with Section III of the Code. The higher RCS average temperature (about 20°F) associated with the elevated mainstream system pressure for the hydrostatic test was evaluated for effects on related Chapter 15 events, MSLB, uncontrolled CEA withdrawal from a subcritical condition, and CEA ejection. The licensee concluded that the consequences of any of these events with the higher RCS temperature would be bounded by the FSAR accident analysis. Additionally the TS procedures will require that the reactor trip breakers be open for the duration of the test to effectively prevent CEA withdrawal. The staff, therefore, finds that the proposed Technical Specification change to acommodate the performance of the hydrostatic test will not affect plant safety and is acceptable.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has 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.

5.0 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 this amendment will not be inimical to the common defense and secrity or to the health and safety of the public.

Dated: April 6, 1988

Principal Contributors: G. Dick