

February 29, 1988

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

Dear Mr. Campbell:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT
IMPACT - CHANGES TO THE TECHNICAL SPECIFICATIONS REGARDING
BORIC ACID CONCENTRATION, ARKANSAS NUCLEAR ONE, UNIT 2
(TAC NOS. 66521 AND 66556)

Enclosed is the Environmental Assessment which relates to your application for changes to the technical specifications for Arkansas Nuclear One, Unit 2. The applications which were dated October 28, 1987 (2CAN108704 and 2CAN108705) requested approval for changes in the boric acid concentration in the refueling water tank, safety injection tanks, and boric acid makeup tanks. Additional information was provided by Arkansas Power and Light Company letter of January 19, 1988 (2CAN018801).

This assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

rs

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

Enclosure:
As stated

cc w/enclosure:
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Mr. T. Gene Campbell
Arkansas Power & Light Company

Arkansas Nuclear One, Unit 2

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UNITED STATES NUCLEAR REGULATORY COMMISSIONARKANSAS POWER AND LIGHT COMPANYARKANSAS NUCLEAR ONE, UNIT 2DOCKET NO. 50-368NOTICE OF ENVIRONMENTAL ASSESSMENT ANDFINDINGS OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to the Technical Specifications (TSs) for Arkansas Nuclear One, Unit 2 (ANO-2) located at Russellville, Arkansas.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: By letters dated October 28, 1987

(2CAN108704 and 2CAN108705), Arkansas Power and Light Company (AP&L, the licensee) requested a change in the plant technical specifications (TSs) to reflect a decrease in the boron concentration required in the boric acid makeup tanks (BAMTs), and an increase in the boron concentration required for the refueling water tank (RWT) and the safety injection tanks (SITs). Additional information regarding time for loss of shutdown margin was provided in the licensees' letter of January 19, 1988 (2CAN018801).

The BAMTs are presently required to contain between 5.0 and 12.0 weight percent boric acid concentration. The proposed change would permit boric acid concentrations of between 2.5 and 3.5 weight percent. Similarly, the RWT and SITs are now required to have a boron concentration between 1731 and 2250 ppm of boron. The proposed change will increase the level to between 2500 ppm and 3000 ppm.

Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for Prior Hearing regarding the proposed changes to the TS, were published in the Federal Register on December 21, 1987 (52 FR48348 and 52 FR48349).

Need for Proposed Action: The proposed TS changes are needed because the licensee will be using extended cycle cores at ANO-2. The proposed changes to the TS will provide the safety and operational enhancements specifically suited to use of the extended cycle cores.

Environmental Impact of the Proposed Action: The proposed increase in boron concentration in the RWT and SITs was considered for the applicable accident analyses in chapter 15 of the Final Safety Analysis Report. The appropriate criteria are met and in some analyses, there are slight increases in the margin of safety due to the minimal increases in the reactor coolant system boron concentration. The contents of the BAMTs are not considered in accident mitigation but are assumed to be added to the containment sump inventory in the evaluation of long term emergency core cooling system performance. The decrease in the boron concentration of the BAMTs almost exactly offsets the boron increases in the RWT and SITs. Consequently there is, either minimal or no change in the potential for boric acid precipitation, spray and sump pH values, iodine removal capabilities, and containment corrosion characteristics. Therefore the proposed changes will not increase to greater than previously determined, the probability of accident and post-accident radiological releases, nor otherwise affect radiological plant effluents. The Commission concludes that there are no significant radiological environmental impacts associated with the proposed TS changes.

With regard to potential non-radiological impacts, the proposed TS changes involve features located entirely within the restricted area as defined in 10 CFR Part 20. They would not affect non-radiological plant effluents and would have no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed exemption.

Alternatives to the Proposed Actions: The principal alternative to the proposed actions would be to deny the requested TS changes. It has been concluded that there is no measurable impact associated with the proposed license amendment; any alternatives to the license amendment will have either no environmental impact or greater environmental impact.

Alternative Use of Resources: This action does not involve the use of any resources beyond the scope of resources used during normal plant operation.

Agencies and Persons Consulted: The Commission's staff reviewed the licensee's safety analysis and changes to the TSs that support the proposed amendment. The staff did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the foregoing environmental assessment, the Commission concluded that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

For further details with respect to this action, see the applications for license amendment dated October 28, 1987, as supplemented by letter dated January 19, 1988. Copies are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555, and at the local public document room located at the Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801.

Dated at Rockville, Maryland, this 29th day of February ,1988.

FOR THE NUCLEAR REGULATORY COMMISSION

Jose A. Calvo

Jose A. Calvo, Director
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation