

January 6, 1988

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: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT
HAZARDS CONSIDERATION DETERMINATION AND OPPORTUNITY FOR
HEARING - ARKANSAS NUCLEAR ONE, UNIT 2

Enclosed is a copy of the "Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing." This notice relates to your application for amendment dated November 30, 1987 to permit the licensee to render eight of the ten main steam safety valves inoperable and reset the remaining two valves in order to carry out a 10 year hydrostatic test on the main steam system.

The notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

151

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

Enclosure:
As stated

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

Arkansas Nuclear One
Unit Nos. 1 and 2

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UNITED STATES NUCLEAR REGULATORY COMMISSIONARKANSAS POWER AND LIGHT COMPANYDOCKET NO. 50-368NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The United States Nuclear Regulatory Commission (the Commission) is considering issuance of amendment to Facility Operating License No. NPF-6, issued to Arkansas Power and Light Company (the licensee), for operation of Arkansas Nuclear One, Unit 2 (ANO-2) located in Russellville, Arkansas.

The proposed amendment would modify the technical specifications to permit the licensee to render eight of the ten main steam safety valves inoperable and reset the remaining two valves in order to carry out a 10 year hydrostatic test on the main steam system in accordance with the licensee's application for amendment dated November 30, 1987. The test is to be carried out with the plant in the Hot Standby mode. The technical specifications presently require that all main steam safety valves be operable in Hot Standby. The licensee also proposes using steam for the test rather than water.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in

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accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The basis for the proposed finding is as follows:

Criterion 1 - Does Not Involve A Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The proposed change would not involve an increase in the probability or consequences of an accident previously evaluated because the reactor would not be critical and the pressures in the main steam system would not exceed the design margin. Although the hydrostatic test requires the main steam system to be at a higher than normal pressure, sufficient overpressure protection will be provided by the two operable code safety valves. Therefore, the probability of a main steam line break (MSLB) accident will not be increased. The elevated secondary system pressure will require a higher primary system average temperature because of the thermodynamic coupling at the hot standby (Mode 3) plant conditions. A reactor coolant system (RCS) average temperature of 545°F at Hot Standby results in a saturated secondary steam pressure of about 1000 psi. The required hydrostatic test pressure upper bound of 1200 psi will correspond to a RCS average temperature about 20°F higher. In the event of a postulated MSLB, this could result in a slightly greater cooldown, and therefore a slightly greater positive reactivity addition than that assumed in the MSLB evaluation. However, the consequences of a postulated MSLB would still be bounded by the MSLB accident analysis. The hydrostatic test will be

performed with significantly greater available shutdown margin and a much less negative moderator temperature coefficient. The negative reactivity associated with these considerations is much greater than the slight additional positive reactivity addition made possible by the elevated secondary system pressure; therefore, an increase in the consequences of a postulated MSLB is not involved.

The higher RCS average temperature associated with the elevated main steam system pressure required for the hydrostatic test was also evaluated by the licensee for any effects on related Chapter 15 events, including Uncontrolled Control Element Assembly (CEA) Withdrawal from a Subcritical Condition and the CEA Ejection. Although the conservative assumptions used for the FSAR Chapter 15 analyses would still bound the consequences of these events with the higher initial RCS temperature, the licensee has elected to perform the hydrostatic test with all CEAs inserted in the reactor core, and has proposed the TS change to require that the reactor trip breakers shall be open for the duration of the test to effectively prevent any possible CEA withdrawal scenario. The worth of the assumed ejected CEA is less than the amount the core will be subcritical. Therefore, an increase in the probability or consequences of a CEA withdrawal or ejection event is not involved. At the end of core life, criticality can not occur at hot conditions with all rods inserted. Additionally, the available shutdown margin and dilution monitor administrative procedural requirements further assure that an increase in the probability or consequences of a Boron dilution event is not involved.

Criterion 2 - Does not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The proposed change would not create the possibility of a new or different kind of accident from any previously evaluated. Analyses of a spectrum of MSLB

and CEA withdrawal accidents were performed for the ANO-2 FSAR and evaluated again for each core reload to demonstrate acceptable consequences. Allowing a system hydrostatic test will not create the possibility of a new or different kind of accident.

Criterion 3 - Does Not Involve a Significant Reduction in a Margin of Safety.

The proposed change would not involve a significant reduction in a margin of safety because the relatively small amount of energy required to provide the pressures for testing could be dissipated through the two operable code safety valves, thus preventing an overpressure in the main steam system. In addition, the proposed change would allow testing such that the steam system will not incur the stresses which would result from the weight of the water if tested by water pressure. Although it could be perceived that the proposed change could allow some reduction in a margin of safety by allowing a higher than normal main steam pressure with a lower steam relief capacity, hydrostatic testing is required by ASME Section XI and, in fact, preserves the margin of safety by demonstrating the integrity of the main steam system pressure boundary. It could also be perceived that the higher RCS average temperature associated with the elevated secondary system pressure required for the hydrostatic testing could reduce the margin of safety, but as discussed under Criterion 1, this potential effect is slight and is offset by the conservatisms inherent in the accident analyses and the conditions under which the testing will be performed.

The staff has reviewed the licensee's no significant hazards consideration analysis. Based on the review and above discussions, the staff proposes to determine that the proposed change does not involve a significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Written comments may be submitted by mail to Rules and Procedures Branch, Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of the FEDERAL REGISTER notice. Written comments may also be delivered to Room 4000, Maryland National Bank Building, 7735 Old Georgetown Road, Bethesda, Maryland from 8:15 a.m. to 5:00 p.m. Copies of written comments received may be examined at the NRC Public Document Room, 1717 H Street, NW, Washington, D.C. The filing of requests for hearing and petitions for leave to intervene is discussed below.

By February 10, 1988 , the licensee may file a request for a hearing with respect to issuance of the amendments to the subject facility operating licenses and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Request for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the

Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR §2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

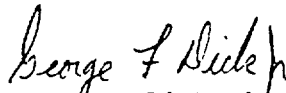
A request for a hearing or a petition for leave to intervene shall be filed with the Secretary of the Commission, United States Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner or representative for the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to Jose A. Calvo: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Nicholas S. Reynolds, Esq., Bishop, Liberman, Cook, Purcell & Reynolds, 1200 Seventeenth St. N.W., Washington, D.C. 20036, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the petition and/or request, that the petitioner has made a substantial showing of good cause for the granting of a late petition and/or request. That determination will be based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated November 30, 1987 which is available for inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Tomlinson Library, Arkansas Technical University, Russellville, Arkansas 72801.

Dated at Bethesda, Maryland this 6th day of January, 1988.

FOR THE NUCLEAR REGULATORY COMMISSION


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