

April 25, 1989

Docket No. 50-313

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

Dear Mr. Campbell:

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 1 (ANO-1) - INCREASE IN
POWER TO ANALYZED LEVEL OF 80 PERCENT

The Commission has forwarded the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination" to the Office of the Federal Register for publication.

This notice relates to your April 24, 1989 application to modify ANO-1 License Condition 2.1.1 to reflect a maximum power level of 80%.

Sincerely,

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

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As stated

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See next page

Mr. T. Gene Campbell
Arkansas Power & Light Company

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Arkansas Department of Health
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Little Rock, Arkansas 72201

UNITED STATES NUCLEAR REGULATORY COMMISSIONARKANSAS POWER AND LIGHT COMPANYDOCKET NO. 50-313NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-51, issued to Arkansas Power and Light Company (AP&L or the licensee), for operation of the Arkansas Nuclear One, Unit 1 (ANO-1) located in Russellville, Arkansas.

The amendment would change the ANO-1 license condition to increase the authorized steady state reactor core power levels to a maximum of 2054 megawatts thermal (80% of full power).

Recently, the licensee informed the NRC of a newly postulated small break in the High Pressure Injection (HPI) System which had not been bounded by existing small break loss of cooling accident (LOCA) analyses. In response to a subsequent AP&L request, the Commission issued emergency Amendment No. 119 authorizing operation for ANO-1 up to an authorized power level of 50% of full power (1284 megawatts thermal), and informed the licensee that a full 10 CFR Part 50 Appendix K analysis of the postulated HPI LOCA would be required as part of an amendment request to increase power above the 50% level. AP&L is currently having Babcock & Wilcox perform such an analysis for an 80% power level and plans to provide the results to the Commission by May 8, 1989. AP&L has requested expedient processing of this amendment for the following reasons.

AP&L was unaware of the consequences of this new limiting break before March 18, 1989 and could not avoid the current situation. Prior to that time, previous LOCA analyses were considered bounding. Further, AP&L quickly undertook measures to respond to this condition and promptly requested the previous and the current amendment. Exigent processing would facilitate the amendment of this ANO-1 operating license to reflect 80% maximum power promptly following conformation of the results of the Babcock & Wilcox LOCA analysis by the Commission. This would permit a timely increase in power level to minimize the impact of continued derated operation. The staff agrees with the licensee's justification for exigent processing and believes the amendment should be issued promptly.

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.

Under the Commission's regulations in 10 CFR 50.92, an amendment request involves no significant hazards considerations if operation of the facility in 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.

In accordance with 10 CFR 50.92, AP&L has assessed whether the proposed change involves no significant hazards considerations. AP&L has concluded that the proposed change to limit operation to 80% of full power involves no

significant hazards considerations because operation of Arkansas Nuclear One, Unit 1 in accordance with this change would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously analyzed.

First, this change does not alter the probability of any previously analyzed accident occurring. The change merely addresses a particular accident scenario without impacting accident-initiating events. Further, this proposed change will not adversely affect the consequences of accidents which have been previously analyzed. Any effect on previously analyzed accidents will remain positive as the reactor will still trip from a lower maximum power level than for accidents previously considered.

Further, the proposed change does not adversely affect the probability or consequences of the postulated HPI small break at issue here. Because an ANO-1 specific ECCS analysis per 10 CFR Part 50 Appendix K has been performed, it has been demonstrated that this break will be fully addressed by available emergency core cooling system (ECCS) mechanisms consistent with applicable ECCS requirements.

Overall, therefore, this change will neither reduce nor adversely impact the probability or consequences of accidents previously analyzed.

- (2) Create the possibility of a new or different kind of accident from any previously analyzed.

First, the ECCS response to other previously postulated accidents remains unchanged and within previously assessed limits of flow paths and flow distributions. Further, all systems and ECCS coolant delivery mechanisms remain, respectively, within their applicable performance limits and flow delivery

capabilities. Thus, system and component performance is not adversely affected by this change, thereby assuring that design capabilities of those systems are not challenged in a manner not previously assessed so as to create the possibility of a new or different kind of accident. The increase in maximum allowable power level would not create the possibility of a new or different kind of accident from any previously analyzed as the possibility of reactor trips at lower power levels had already be considered in previous accident analyses.

(3) Involve a significant reduction in the margin of safety.

The proposed change to the maximum operating power level would increase the maximum power level at which any transient could occur. However, this proposed power level is still below the level at which ANO-1 was originally licensed. The response to transients terminated at lower power levels is typically milder and more easily controlled than the response to transients terminated at the higher power level at which ANO-1 was originally evaluated. Therefore, this increase of the maximum permissible power level would not involve a significant reduction in the margin of safety previously provided. With respect to the HPI break at issue, the margin of safety provided by the proposed maximum power level now reflects the margins provided by specific application of the conservative assumptions and analytical approaches of 10 CFR 50.46 and 10 CFR Part 50 Appendix K to ANO-1. Thus the inherent margins of safety provided by those criteria are provided for this postulated break.

The staff has reviewed the licensee's assessment and agrees that the proposed amendment involves no significant hazards considerations.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 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 the Regulatory Publications Branch, Division of Freedom of Information and Publications Services, Office of Administration and Resources Management, 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 P-216, Phillips Building, 7920 Norfolk Avenue, 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, the Gelman Building, 2120 L Street, NW, Washington, D.C. The filing of requests for hearing and petitions for leave to intervene is discussed below.

By May 15, 1989 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license 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 request for hearing and a petition for leave to intervene. Requests for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rule 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 pre-hearing 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 that 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 the amendment is issued before the expiration of 30-days, the Commission will make a final determination on the issue of no significant hazards considerations. If a hearing is requested, 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 considerations, 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 request involves significant hazards considerations, 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 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the amendment involves no significant hazards considerations. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of 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 must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW, Washington, DC, by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 325-6000 (in Missouri 1-(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, Cook, Percell & Reynolds, 1400 L Street, N.W., Washington, D.C. 20005-3502

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 presiding Atomic Safety and Licensing Board that the petition and/or request should be granted 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 April 24, 1989, which is available for public inspection at

the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. 20555, and at the Local Public Document Room, Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801.

Dated at Rockville, Maryland, this 25th day of April 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

Chester Poslusny Jr.

Chester Poslusny, Jr., Project Manager
Project Directorate - IV
Division of Reactor Projects - III,
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