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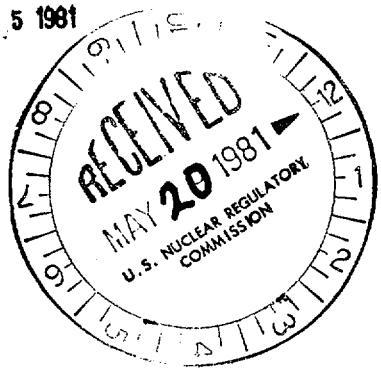

Docket No. 50-313

Mr. William Cavanaugh, III
Vice President, Generation
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Amendment No. 55 to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated April 2, 1979, as supplemented October 31, 1980.

This amendment modifies the ANO-1 TSs to require the ANO-1 purge valves be closed whenever the reactor coolant system temperature is equal to or greater than 200°F. This amendment also updates pages i and ii of the TS Table of Contents.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

In our letter of November 29, 1978, we identified the generic concerns of purging and venting of containments to all operating reactor licensees and requested your response to these concerns. Our review of your response was interrupted by the TMI accident and its demands on staff resources. Consequently, as you know, an Interim Position on containment purging and venting was transmitted to you on October 26, 1979. You were requested to implement short-term corrective actions to remain in effect pending completion of our longer-term review of your response to our November 29, 1978 letter.

Over the past several months our contractors and we have been reviewing the responses to our November 1978 letter to close out our long-term review of this rather complex issue. The components of this review are as follows:

1. Conformance to Standard Review Plan Section 6.2.4 Revision 1 and Branch Technical Position CSB 6-4 Revision 1.

   These documents were provided as enclosures to our November 1978 letter.

OFFICE	P						
SURNAME							
DATE	8105220036						

2. Valve Operability

Although the Interim Position allowed blocking of the valves at partial-open positions, this is indeed an interim position. Earlier we requested a program demonstrating operability of the valves in accordance with our "Guidelines for Demonstrative Operability of Purge and Vent Valves." These Guidelines were sent to you in our letter of September 27, 1979. There is an acceptable alternative which you may wish to consider in lieu of completing the valve qualification program for the large butterfly-type valves. This would be the installation of a fully-qualified mini-purge system with valves 8-inches or smaller to bypass the larger valves. Such a system change might prove more timely and more cost-effective. The system would meet BTP CSB 6-4 item B.1.c.

3. Safety Actuation Signal Override

This involves the review of safety actuation signal circuits to ensure that overriding of one safety actuation signal does not also cause the bypass of any other safety actuation signal.

4. Containment Leakage Due to Seal Deterioration

Position B.4 of the BTP CSB 6-4 requires that provisions be made to test the availability of the isolation function and the leakage rate of the isolation valves in the vent and purge lines, individually, during reactor operations. But CSB 6-4 does not explain when or how these tests are to be performed. After we complete the development of Standard Technical Specifications which will satisfy our position on this issue, we will forward them, to you with a request for consideration of a submittal of proposed TS for ANO-1.

The status of our long-term review of the above items for the ANO-1 facility is as follows:

1. Conformance to Standard Review Plans Section 6.2.4 Revision 1 and Branch Technical Position CSB 6-4 Revision 1.

With the issuance of this amendment to your license, this issue is complete for ANO-1. However, if you should decide to request a change in your TS which would allow some purging, Enclosure 4 is a restatement of salient features of the position as interpreted by the staff. Evaluation of ANO-1 to this restatement and a comparison to BTP CSB 6-4 positions would be needed to reopen this review.

2. Valve Operability

With the issuance of this amendment this issue is complete for ANO-1. It is our understanding that you do not intend to qualify the existing valves.

OFFICE ▶							
SURNAME ▶							
DATE ▶							

3. Safety Actuation Signal Override

This item is complete for ANO-1. Our letter dated August 14, 1980, provided our evaluation and acceptance of the electrical instrumentation and control design aspects of the override of the containment purge valve isolation and other safety features actuation signals.

Sincerely,

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 55 DPR-51
2. Safety Evaluation
3. Notice
4. Restatement of Staff Position

cc w/enclosures:
See next page

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Concur in amendment and Fed. Reg. notice subject to revision noted in TS 3.23.1, which makes TS language consistent with letter and Fed. Reg. notice.

*SEE PREVIOUS WHITE FOR CONCURRENCES

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Docket No. 50-313

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Vice President, Generation
and Construction
Arkansas Power & Light Company
P. O. Box 551
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Sincerely,

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. DPR-51
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4:DL	AD:OR:DL	OELD	ORB#1:DL	
SURNAME	RIngram	GVissing;cf	JStolz	TNovak		EReeves	
DATE	4/21/81	4/24/81	4/27/81	4/ /81	4/ /81	4/ /81	

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

DISTRIBUTION
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ORB#4 Rdg
RIngram

May 15, 1981

Docket No. 50-313

Docketing and Service Section
Office of the Secretary of the Commission

SUBJECT: ARKANSAS POWER AND LIGHT COMPANY

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

☐ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).

☐ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.

☐ Notice of Availability of Applicant's Environmental Report.

☐ Notice of Proposed Issuance of Amendment to Facility Operating License.

☐ Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.

☐ Notice of Availability of NRC Draft/Final Environmental Statement.

☐ Notice of Limited Work Authorization.

☐ Notice of Availability of Safety Evaluation Report.

☐ Notice of Issuance of Construction Permit(s).

☐ Notice of Issuance of Facility Operating License(s) or Amendment(s).

☒ Other: Amendment No. 55
Referenced documents have been provided PDR.

Division of Licensing, ORB#4
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

OFFICE→	ORB#4:DL					
SURNAME→	RIngram:cf					
DATE→	5/15/81					

NRC FORM 102 (1-76)

Docket file

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

May 15, 1981

Docket No. 50-313

Mr. William Cavanaugh, III
Vice President, Generation
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

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The status of our long-term review of the above items for the ANO-1 facility is as follows:

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With the issuance of this amendment to your license, this issue is complete for ANO-1. However, if you should decide to request a change in your TS which would allow some purging, Enclosure 4 is a restatement of salient features of the position as interpreted by the staff. Evaluation of ANO-1 to this restatement and a comparison to BTP CSB 6-4 positions would be needed to reopen this review.

2. Valve Operability

With the issuance of this amendment this issue is complete for ANO-1. It is our understanding that you do not intend to qualify the existing valves.

3. Safety Actuation Signal Override

This item is complete for ANO-1. Our letter dated August 14, 1980, provided our evaluation and acceptance of the electrical instrumentation and control design aspects of the override of the containment purge valve isolation and other safety features actuation signals.

Sincerely,

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No. 55 DPR-51
2. Safety Evaluation
3. Notice
4. Restatement of Staff Position

cc w/enclosures:
See next page

Arkansas Power & Light Company

cc w/enclosure(s):

Mr. David C. Trimble
Manager, Licensing
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Mr. James P. O'Hanlon
General Manager
Arkansas Nuclear One
P. O. Box 608
Russellville, Arkansas 72801

Mr. William Johnson
U.S. Nuclear Regulatory Commission
P. O. Box 2090
Russellville, Arkansas 72801

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 420, 7735 Old Georgetown Road
Bethesda, Maryland 20014

Mr. Nicholas S. Reynolds
Debevoise & Liberman
1200 17th Street, NW
Washington, DC 20036

Arkansas Tech University
Russellville, Arkansas 72801

Honorable Ermil Grant
Acting County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

cc w/enclosure(s) & incoming dtd.:
4/2/79, 10/31/80

Director, Bureau of Environmental
Health Services
4815 West Markham Street
Little Rock, Arkansas 72201

Director, Criteria and Standards
Division
Office of Radiation Programs (ANR-460)
U. S. Environmental Protection Agency
Washington, D. C. 20460

U. S. Environmental Protection Agency
Region VI Office
ATTN: EIS COORDINATOR
1201 Elm Street
First International Building
Dallas, Texas 75270

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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE - UNIT NO.1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55
License No. DPR-51

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

   A. The application for amendment by Arkansas Power and Light Company (the licensee) dated April 2, 1979, as supplemented October 31, 1980, 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 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 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. DPR-51 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.55 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 15, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Table of Contents	(page i)
	(page ii)
66t	(new page)
110z	(new page)

TABLE OF CONTENTS

3.23 REACTOR BUILDING PURGE VALVES

APPLICABILITY

This specification applies to the reactor building purge supply and exhaust isolation valves.

OBJECTIVE

To specify that reactor building isolation purge valves be closed whenever containment integrity is required by TS 3.6.1.

SPECIFICATION

3.23.1 The reactor building purge supply and exhaust isolation valves shall be closed prior to the reactor coolant system being heated above 200°F.

BASES

The reactor building supply and exhaust isolation valves are required to be closed during normal plant operation in order to ensure reactor building integrity. Purging is allowed only during cold shutdown or in refueling shutdown.

4.26 REACTOR BUILDING PURGE VALVES

APPLICABILITY

This specification applies to the reactor building purge supply and exhaust isolation valves.

OBJECTIVE

To assure reactor building integrity.

SPECIFICATION

4.26.1 The reactor building purge supply and exhaust isolation valves shall be determined closed:

a. At least once per 31 days when containment integrity is required by TS 3.6.1; and,

b. Prior to heating the reactor coolant system above 200°F.

BASES

Determination of reactor building purge valve closure will ensure that reactor building integrity is not unintentionally breeched.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO.55 TO

FACILITY OPERATING LICENSE NO. DPR-51

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

Introduction

By letter dated April 2, 1979, Arkansas Power and Light Company (the licensee or AP&L) requested amendment of the Technical Specifications, Appendix A, appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit No. 1 (ANO-1). The change would limit reactor building purging to 90 hours per calendar year whenever reactor building integrity is required. The proposed change would also provide surveillance requirements for the purge valves.

Subsequently, by letter dated December 12, 1979, the licensee responded to our letter dated October 26, 1979, with a commitment to maintain the ANO-1 purge valves closed whenever the reactor is not in a cold shutdown or refueling mode. We discussed this commitment with the licensee's staff and they agreed to modify the request for amendment such that the commitment relating to the purge valves would be implemented in the Technical Specifications. By letter dated October 31, 1980, the licensee modified the proposed amendment with proposed Technical Specification changes which would require the purge valves be closed whenever the reactor coolant temperature is equal to or greater than 200°F. The licensee also proposed surveillance requirements which would require the purge valves be determined to be closed at least once every 31 days when containment integrity is required and prior to heating the reactor above 200°F.

Discussion and Evaluation

Our letter dated October 26, 1979, requested in a position statement, that the licensee maintain containment purge and vent isolation valves closed whenever the reactor is not in the cold shutdown or refueling mode until such time that operability requirements for these valves can be demonstrated and certain actuation signal configurations are assured.

The licensee's letter dated December 12, 1979, would administratively satisfy our request. However, the proposed amendment as modified by the licensee's October 31, 1980, submittal would implement our request in the licensee's Facility Operating License.

The current Technical Specifications provide for no limitations on containment purging during reactor operation. Therefore, the limitation on purging as proposed would provide no decrease in the margin of safety or increase the probability or consequences of an accident.

We have determined the proposed amendment to be responsive to our request and to be acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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 security or to the health and safety of the public.

Dated: May 15, 1981

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-313

ARKANSAS POWER & LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No.55 to Facility Operating License No. DPR-51, issued to Arkansas Power & Light Company (the licensee), which revised the Technical Specifications (TSs) for operation of Arkansas Nuclear One, Unit 1 (ANO-1) located in Pope County, Arkansas. The amendment is effective as of its date of issuance.

The amendment modifies the ANO-1 TSs to require the ANO-1 purge valves be closed whenever the reactor coolant system temperature is equal to or greater than 200°F. This amendment also updates pages i and ii of the TS Table of Contents.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the licensee's application dated April 2, 1979, as supplemented by letter dated October 31, 1980, (2) Amendment No.55 to License No. DPR-51, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Arkansas Tech University, Russellville, Arkansas. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 15th day of May 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

ENCLOSURE 4

RESTATEMENT OF STAFF POSITION

1. Purging/venting should be minimized during reactor operation because the plant is inherently safer with closed vent valves (containment) than with open lines which require valve action to provide containment. (Serious consideration is being given to ultimately requiring that future plants be designed such that purging/venting is not required during operation).
2. Some purging/venting on current plants will be permitted provided that:
   a) purging is needed and justified for safety purposes, and
   b) valves are judged by the staff to be both operable and reliable, and
   c) the estimated amount of radioactivity released during the time required to close the valve(s) following a LOCA either
      i. does not cause the total dose to exceed the 10 CFR Part 100 Guidelines; then a goal should be established which represents a limit on the annual hours of purging expected through each particular valve, or
      ii. causes the total dose to exceed the guideline valves; then purging/venting shall be limited to 90 hours/year.
3. Purging/venting should not be permitted when valves are being used that are known to be not operable or reliable under transient or accident conditions.