DCS MS 016

Distribution
Docket File
NRC PDR
Local PDR
SECY
NSIC
ORB#3 Reading
DEisenhut
OELD
LJHarmon
WJones
TBarnhardt (8)
GVissing
CMiles
RDiggs
DBrinkman
ACRS (10)
RClark
PKreutzer(3)
RLee/ETourigny
ASLAB
Gray File +8
ORB#4 Rdg
JStolz
RIngram
E. Reeves
M. Fields

Docket Nos. 50-313
and 50-368

Mr. John Griffin
Vice President, Nuclear
Operations
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Griffin:

The Commission has issued the enclosed Amendment Nos. 79 and 46 to Facility Operating License Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications (TS) in response to your applications dated September 17, 1981 and March 12, 1982, as supplemented March 16, 1983.

These amendments revise the TS to require verification of leak rate testing of the purge valves.

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

To complete the action regarding the purge valves for ANO-1&2, you have yet to submit TS which require the valves to be locked closed by key lock switches. You have committed to make the necessary modifications no later than the next refueling outage for each unit. We therefore request you propose TS changes at least 60 days prior to installation of the key lock switches.

These amendments and your commitment to the key lock switches for the purge valves resolve the NUREG-0737, Item II.E.4.2, Containment Isolation Dependability, for ANO-1&2.

Sincerely,

Original signed by

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

Original signed by
C M Trammell
for Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosures:
1. Amendment No. 79 to DPR-51
2. Amendment No. 46 to NPF-6
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

CMT 5/3/83

ORB#4:DL	ORB#3:DL	AD:OR:DL	OELD
JStolz	RAClark	GCLainas	
4/ /83	4/29/83	4/29/83	5/3/83

OFFICE	ORB#4:DL	ORB#4:DL	ORB#3:DL	ORB#3:DL	ORB#1:DL
SURNAME	RIngram	GVissing/pn	PMKreutzer	RLee	EReeves
DATE	4/21/83	4/29/83	4/ /83	4/28/83	4/29/83

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

DISTRIBUTION:
Docket File
ORB#3 Rdg
ORB#4 Rdg
PMKreutzer
RIngram

Docket No.50-313/50-368

Docketing and Service Section
Office of the Secretary of the Commission

SUBJECT: ARKANSAS POWER & LIGHT COMPANY, Arkansas Nuclear One, Unit Nos. 1 and 2

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 Nos. 79 and 46.
Referenced documents have been provided PDR.

Division of Licensing
Office of Nuclear Reactor Regulation

Enclosure:
As Stated

OFFICE→	ORB#3:DL					
SURNAME→	PMKreutzer/pn					
DATE→	5/4/83					

NRC FORM 102 7—79

cc:

Mr. John Marshall
Manager, Licensing
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Mr. James M. Levine
General Manager
Arkansas Nuclear One
P. O. Box 608
Russellville, Arkansas 72801

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220
7910 Woodmont Avenue
Bethesda, Maryland 20814

Nicholas S. Reynolds, Esq.
c/o DeBevoise & Liberman
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

U.S. Environmental Protection Agency
Region VI Office
ATTN: Regional Radiation
Representative
1201 Elm Street
Dallas, Texas 75270

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

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

Regional Administrator
Nuclear Regulatory Commission, Region IV
Office of Executive Director for Operations
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Mr. J. Callan
U.S. NRC
P. O. Box 2090
Russellville, Arkansas 72801

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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 79
License No. DPR-51

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

   A. The application for amendment by Arkansas Power & Light Company (the licensee) dated September 17, 1981, as supplemented March 16, 1983, 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:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 79 , 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, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: May 3, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 79

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change.

Page
110z

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 at least once per 31 days when containment integrity is required by TS 3.6.1.

4.26.2 Prior to exceeding conditions which require establishment of reactor building integrity per TS 3.6.1, the leak rate of the purge supply and exhaust isolation valves shall be verified to be within acceptable limits per TS 4.4.1, unless the test has been successfully completed within the last three months.

BASES

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

As a result of Generic Issue B-20, "Containment Leakage Due to Seal Deterioration," it was concluded that excess leakage past valve resilient seals is typically caused by severe environmental conditons and/or wear due to use. Recommended leak test frequencies of three months are deemed to be adequate to detect seal degradation of resilient seals.

The three month test need not be conducted with the precision of the Type C 10CFR50, Appendix J criteria, however the test must be sufficient to detect degradation.

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

ARKANSAS POWER & LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 46
License No. NPF-6

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

   A. The application for amendment by Arkansas Power & Light Company (the licensee) dated March 12, 1982, as supplemented March 16, 1983, 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. NPF-6 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 46, 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

for Charles M. Trammell
Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: May 3, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 46

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is provided to maintain document completeness.

Page
3/4 6-17

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.1.2 Each isolation valve specified in Table 3.6-1 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by verifying that on a containment isolation test signal, each isolation valve actuates to its isolation position.

4.6.3.1.3 The isolation time of each power operated or automatic valve of Table 3.6-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.3.1.4 Prior to exceeding conditions which require establishment of reactor building integrity per TS 3.6.1.1, the leak rate of the containment purge supply and exhaust isolation valves listed in Table 3.6-1 Part B shall be verified to be within acceptable limits per TS 4.6.1.2, unless the test has been successfully completed within the last three months.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NOS. 79 AND 46 TO FACILITY OPERATING LICENSES

NOS. DPR-51 AND NPF-6

ARKANSAS POWER & LIGHT COMPANY

ARKANSAS NUCLEAR ONE, UNITS 1 AND 2

DOCKET NOS. 50-313 AND 50-368

Introduction

By letters dated September 17, 1981 and March 12, 1982, supplemented by letter dated March 16, 1983, Arkansas Power and Light Company (the licensee or AP&L) requested amendments of the Technical Specifications (TS), Appendix A, appended to Facility Operating Licenses Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Units Nos. 1 and 2 (ANO-1&2), respectively. The proposed change would require verification of leak rate testing of the purge supply and exhaust valves prior to reactor startup after every cold shutdown unless the test had been successfully completed within the previous three months for both ANO-1&2.

Background

As a result of the numerous reports on unsatisfactory performance of the resilient seats for the isolation valves in containment purge and vent lines (addressed in OIE Circular 77-11, dated September 6, 1977), Generic Issue B-20, "Containment Leakage Due to Seal Deterioration," was established to evaluate the matter and establish an appropriate testing frequency for the isolation valves. Excessive leakage past the resilient seats of isolation valves in purge/vent lines is typically caused by severe environmental conditions and/or wear due to frequent use. Consequently, the leakage test frequency for these valves should be keyed to the occurrence of severe environmental conditions and the use of the valves, rather than the current requirements of 10 CFR, Appendix J.

It was recommended that the following provision be added to the TS for the leak testing of purge/vent line isolation valves:

> "Leakage integrity tests shall be performed on the containment isolation valves with resilient material seals in (a) active purge/vent systems (i.e., those which may be operated during plant operating Modes 1 through 4) at least once every three months and (b) passive purge systems (i.e., those which must be administratively controlled closed during reactor operating Modes 1 through 4) at least once every six months."

By way of clarification, the above proposed surveillance specification was predicated on our expectation that a plant would have a need to go to cold shutdown several times a year. To cover the possibility that this may not occur, a maximum test interval of 6 months was specified. However, it was not our intent to require a plant to shut down just to conduct the valve leakage integrity tests. If licensees anticipate long duration power operations with infrequent shutdown, then installation of a leak test connection that is accessible from outside containment may be appropriate. This would permit simultaneous testing of the redundant valves.

Discussion

ANO-1&2 do not have the capability to leak test the purge vent and exhaust valves from outside the containment during power operation. In order to test these valves every six months to comply with our position, it would require a shutdown of the plants in order to make entry into the containment. However, it is not the intent of our position to require shutdown only to leak test these valves. Therefore, the licensee, by letter dated March 16, 1983, proposed a TS change which would leak test these valves before startup after each cold shutdown unless the valves were tested within the previous three months. To support the licensee's proposed TS change, by letter dated June 7, 1982, the licensee indicated that seal failure was not a problem at ANO-1&2. Past failures of these valves during leak testing were due, in all cases but one, to failure of the valve to seat properly. Also, ANO-1&2 are located in a relatively mild climate which decreases the probability of seal deterioration.

Also by letter dated March 16, 1983, the licensee provided a review of the operating history for ANO-1&2. This review indicated that each unit has an average operation period of about two months. Therefore, the valves would be tested within six-month intervals under the proposed TS based on the operating experience that cold shutdown have occurred at least within six months intervals

Evaluation

We have reviewed the licensee's submittals regarding this issue and have determined that the proposed TS changes are acceptable based on the following plant unique considerations:

1. A review of the operating history for both ANO-1&2 shows that each unit has an average operation period of about two months. This will result in a higher frequency of valve testing than our recommendation of every six months.

2. ANO-1&2 are located in a relatively mild climate, which decreases the probability of seal deterioration.

3. Seal deterioration has not been a problem at ANO-1&2. Past failures of these valves during leak testing were due, in all cases but one, to failure of the valve to seat properly.

Environmental Consideration

We have determined that the amendments do 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 amendments involve 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 these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 3, 1983

Principal Contributor:
G. Vissing
M. Fields

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-313 AND 50-368

ARKANSAS POWER & LIGHT COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 79 and 46 to Facility Operating License Nos. DPR-51 and NPF-6 issued to Arkansas Power & Light Company (the licensee), which revised the Technical Specifications (TS) for operation of Arkansas Nuclear One, Unit Nos. 1 and 2 respectively (the facilities), located in Pope County, Arkansas. The amendments are effective as of the date of issuance.

The amendments revise the TS to require verification of leak rate testing of the purge valves.

The applications for the amendments comply 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 amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of the amendments 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 the issuance of the amendments.

For further details with respect to this action, see (1) the applications for amendments dated September 17, 1981 and March 12, 1982, as supplemented March 16, 1983, (2) Amendment Nos. 79 and 46 to Facility Operating License Nos. DPR-51 and NPF-6, and (3) the Commission's related Safety Evaluation. These items are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C. 20555 and at the Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801. 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 3rd day of May, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles M. Trammell

Charles M. Trammell, Acting Chief
Operating Reactors Branch #3
Division of Licensing