

February 28, 1991

Docket Nos. 50-313  
and 50-368

Mr. Neil S. Carns  
Vice President, Operations ANO  
Energy Operations, Inc.  
Route 3 Box 137G  
Russellville, Arkansas 72801

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GPA/PA(MS2G5)  
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E. Jordan(MNBB3701)

Dear Mr. Carns:

SUBJECT: ISSUANCE OF AMENDMENT NOS. 144 AND 116 TO FACILITY OPERATING LICENSE  
NOS. DPR-51 AND NPF-6 - ARKANSAS NUCLEAR ONE, UNITS 1 AND 2  
(TAC NOS. 79297 AND 79298)

The Commission has issued the enclosed Amendment Nos. 144 and 116 to Facility  
Operating License Nos. DPR-51 and NPF-6 for the Arkansas Nuclear One, Unit  
Nos. 1 and 2 (ANO-1&2). These amendments consist of changes to the Technical  
Specifications (TS) in response to your application dated December 11, 1990.

The amendments revise ANO-1 TS 6.9 and 6.13 and ANO-2 TS 6.10 and 6.12 to  
delete the sections regarding Environmental Qualification. The changes simplify  
the TS by removing an unnecessary specification which has been superseded by  
another regulatory requirement.

A copy of our related Safety Evaluation is also enclosed. A Notice of Issuance  
will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by:

Thomas W. Alexion, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III, IV and V  
Office of Nuclear Reactor Regulation

Original signed by:

Sheri R. Peterson, Project Manager  
Proeject Directorate IV-1  
Division of Reactor Projects III, IV, and V  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 144 to DPR-51
- 2. Amendment No. 116 to NPF-6
- 3. Safety Evaluation

cc w/enclosures:  
See next page

OFC	: PD4-1/LA	: PD4-1/PM	: PD4-1/PM	: OGC	: PD4-1/D	:
NAME	: L Berry	: T Alexion	: S Peterson	:	: T Quay	:
DATE	: 04/02/91	: 1/14/91	: 01/03/91	: 1/16/91	: 2/28/91	:

OFFICIAL RECORD COPY Document Name: ANO AMEND/79297/79298

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

February 28, 1991

Docket Nos. 50-313  
and 50-368

Mr. Neil S. Carns  
Vice President, Operations ANO  
Entergy Operations, Inc.  
Route 3 Box 137G  
Russellville, Arkansas 72801

Dear Mr. Carns:

SUBJECT: ISSUANCE OF AMENDMENT NOS. 144 AND 116 TO FACILITY OPERATING LICENSE  
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A copy of our related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Handwritten signature of Thomas W. Alexion in cursive.

Thomas W. Alexion, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III, IV and V  
Office of Nuclear Reactor Regulation

Handwritten signature of Sheri R. Peterson in cursive.

Sheri R. Peterson, Project Manager  
Project Directorate IV-1  
Division of Reactor Projects III, IV, and V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 144 to DPR-51
2. Amendment No. 116 to NPF-6
3. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Neil S. Carns  
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Arkansas Nuclear One, Units 1 & 2

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Honorable Joe W. Phillips  
County Judge of Pope County  
Pope County Courthouse  
Russellville, Arkansas 72801

Ms. Greta Dicus, Director  
Division of Environmental Health  
Protection  
Arkansas Department of Health  
4815 West Markam Street  
Little Rock, Arkansas 72201



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

ENERGY OPERATIONS, INC.

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 144  
License No. DPR-51

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Entergy Operations, Inc. (the licensee) dated December 11, 1990, 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 license 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.

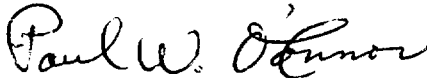
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. DPR-51 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No.144 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of 30 days from its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



for Theodore R. Quay, Director  
Project Directorate IV-1  
Division of Reactor Projects III, IV, and V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 28, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 144

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

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

REMOVE PAGES

129  
147

INSERT PAGES

129  
147

- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by Section 17 of the Quality Assurance Manual for Operations.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10CFR50.59.
- k. Records of meetings of the PSC and the SRC.
- l. (DELETED)
- m. Records of the service lives of the seals of all hydraulic snubbers applicable to Specification 3.16 including the date at which the service life commences and associated installation and maintenance records.
- n. Records of analyses required by the Radiological Environmental Monitoring Program.

#### 6.10 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

#### 6.11 HIGH RADIATION AREA

6.11.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10CFR20, each high radiation area (as defined in 20.202(b)(3) of 10CFR20) in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and shall be controlled by requiring the issuance of a radiation work permit. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a pre-set integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation work permit.

6.13 (DELETED)





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

ENERGY OPERATIONS, INC.

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 116  
License No. NPF-6

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Entergy Operations, Inc. (the licensee) dated December 11, 1990, 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 license 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.

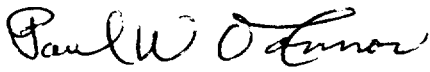
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-6 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 116, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of 30 days from its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
for Theodore R. Quay, Director  
Project Directorate IV-1  
Division of Reactor Projects III, IV, and V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 28, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 116

FACILITY OPERATING LICENSE NO. NPF-6

DOCKET NO. 50-368

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

REMOVE PAGES

6-23  
6-24

INSERT PAGES

6-23  
6-24

## ADMINISTRATIVE CONTROL

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- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the unit staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10CFR50.59.
- k. Records of meetings of the PSC and the SRC.
- l. Records of changes to the Core Protection Calculator System (CPCS) SOFTWARE. Changes to the CPCS SOFTWARE shall be made in accordance with methods approved by the NRC. These records shall include the following:
  - 1. Purpose of change.
  - 2. Detailed description of changes including algorithms, changes to the assembly listings, checksums and disk identification numbers.
  - 3. Summary of validation test results.
- m. (DELETED)
- n. Records of the service lives of the seals of all hydraulic snubbers required by Specification 3.7.8; including the date at which the service life commences and associated installation and maintenance records.

### 6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 (DELETED)

## ADMINISTRATIVE CONTROL

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### 6.12.2 (DELETED)

### 6.13 HIGH RADIATION AREA

6.13.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area (as defined in 20.202(b)(3) of 10 CFR 20) in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring the issuance of a radiation work permit. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation work permit.

6.13.2 The requirements of 6.13.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and access to these areas shall be maintained under the administrative control of the Shift Supervisor on duty and/or the designated radiation protection manager.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 144 AND 116 TO

FACILITY OPERATING LICENSE NOS. DPR-51 AND NPF-6

ENERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT NOS. 1 AND 2

DOCKET NOS. 50-313 AND 50-368

INTRODUCTION

By letter dated December 11, 1990, Entergy Operations, Inc. (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-51 and NPF-6 for Arkansas Nuclear One, Unit Nos. 1 and 2 (ANO-1&2). The proposed amendments would revise ANO-1 TS 6.9 and 6.13 and ANO-2 TS 6.10 and 6.12 to delete the sections regarding Environmental Qualification. The proposed change is being made to simplify the TS by removing an unnecessary specification which has been superseded by another regulatory requirement.

EVALUATION

By letter dated October 24, 1980, the staff transmitted to the licensee an "Order for Modification of License Concerning Environmental Qualification of Safety-Related Electrical Equipment." The Order modified the License for Arkansas Nuclear One to include Environmental Qualifications as part of Section 6, "Administrative Controls," of the TS. Environmental Qualifications have since been included in the Code of Federal Regulations as 10 CFR 50.49, "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants."

Specifically, the October 24, 1980 Order incorporated a deadline in the TS by which all safety-related electrical equipment in the facility would be qualified in accordance with specified provisions. This deadline has been superseded by 10 CFR 50.49, Section g. The Order also incorporated a requirement in the TS for complete and auditable records to be maintained in a central location. This recordkeeping requirement has been superseded by 10 CFR 50.49, Section j.

As 10 CFR 50.49 supersedes the October 24, 1980 Order, the licensee proposed to remove the reference to the October 24, 1980 Order from the TS as an administrative change. The change is being made to simplify the TS by removing an unnecessary specification which has been superseded by another regulatory requirement. Therefore, the staff finds this change to ANO-1 TS 6.9 and 6.13 and ANO-2 TS 6.10 and 6.12 to be acceptable.

ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) 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.

Dated: February 28, 1991

Principal Contributor: S. Peterson