Docket No. 50-313

Mr. Jerry W. Yelverton Vice President, Operations ANO Entergy Operations, Inc. Route 3 Box 137G Russellville, Arkansas 72801

Dear Mr. Yelverton:

SUBJECT: ISSUANCE OF AMENDMENT NO. 167 TO FACILITY OPERATING LICENSE NO. DPR-51 - ARKANSAS NUCLEAR ONE, UNIT NO. 1 (TAC NO. M86263)

The Commission has issued the enclosed Amendment No. 167 to Facility Operating License No. DPR-51 for the Arkansas Nuclear One, Unit No. 1 (ANO-1). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated March 19, 1993.

The amendment updates the reactor coolant system (RCS) leakage test pressure technical specifications to agree with the requirements of the 1980 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI (through winter 1981 addenda).

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

Sincerely,

ORIGINAL SIGNED BY:

Roby B. Bevan, Project Manager Project Directorate IV-1 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 167 to DPR-51

2. Safety Evaluation

cc w/enclosures: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

August 2, 1993

Docket No. 50-313

Mr. Jerry W. Yelverton Vice President, Operations ANO Entergy Operations, Inc. Route 3 Box 137G Russellville, Arkansas 72801

Dear Mr. Yelverton:

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Sincerely,

Roby B. Bevan, Project Manager

Project Directorate IV-1

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 167 to DPR-51

2. Safety Evaluation

cc w/enclosures: See next page Mr. Jerry W. Yelverton Entergy Operations, Inc.

cc:

Mr. Donald C. Hintz, President and Chief Executive Officer Entergy Operations, Inc. P. O. Box 31995 Jackson, Mississippi 39286

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Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

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

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

ENTERGY OPERATIONS INC.

DOCKET NO. 50-313

ARKANSAS NUCLEAR ONE, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 167 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 March 19, 1993, 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. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 167, 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 its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Foul W Carmon for Harry Rood, Acting Director Project Directorate IV-1

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 2, 1993

FACILITY OPERATING LICENSE NO. DPR-51 DOCKET NO. 50-313

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

REMOVE PAGE

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78

4.3 TESTING FOLLOWING OPENING OF SYSTEM

Applicability

Applies to test requirements for Reactor Coolant System integrity.

Objective

To assure Reactor Coolant System integrity prior to return to criticality following normal opening, modification, or repair.

Specification

- 4.3.1 When Reactor Coolant System repairs or modifications have been made, these repairs or modifications shall be inspected and tested to meet all applicable code requirements prior to the reactor being made critical.
- 4.3.2 Following any opening of the Reactor Coolant System, it shall be leak tested at not less than 2155 psig, prior to the reactor being made critical, in accordance with the ASME Boiler and Pressure Vessel Code, Section XI; IWA-5000.
- 4.3.3 The limitations of Specification 3.1.2 shall apply.

Bases

Repairs or modifications made to the Reactor Coolant System are inspectable and testable under applicable codes, such as B 31.7, and ASME Boiler and Pressure Vessel Code, Section XI.

For normal opening, the integrity of the Reactor Coolant System in terms of strength, is unchanged. The ASME Boiler and Pressure Vessel Code, Section XI; IWA-5000 requires a system leak test at nominal operating pressure (2155 psig) following system opening. At the end of refueling outages, this test also satisfies the requirements of IWB-2500, Table IWB-2500-1; Category B-P items B15-10, B15-20, B15-30, B15-40, B15-50, B15-60, and B15-70 for all Class I pressure retaining components.

REFERENCES

(1) FSAR, Section 4
(2) ASME Boiler and Pressure Vessel Code, Section XI



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 167 TO

FACILITY OPERATING LICENSE NO. DPR-51

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

1.0 INTRODUCTION

By letter dated March 19, 1993, Entergy Operations, Inc. (the licensee), submitted a request for changes to the Arkansas Nuclear One, Unit No. 1 (ANO-1) Technical Specifications (TS). The amendment would update the reactor coolant system (RCS) leakage test pressure in TS 4.3.2 to agree with the requirements of the 1980 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI (through winter 1981 addenda).

2.0 **EVALUATION**

The NRC staff's review of the proposed amendment included an assessment of TS 4.3, "Testing Following Opening of System." Specifically, the existing specification requires a minimum RCS leakage test pressure of 2285 psig. IWA-5000 of the 1980 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, requires leakage tests be performed at the nominal operating pressure (2155 psig).

The licensee proposes to update TS 4.3.2 to allow RCS leakage tests to be performed at nominal operating pressure (2155 psig). Currently, the RCS leakage detection tests are performed at 2285 psig. This specification is based on the 1971 Edition of the ASME Boiler and Pressure Vessel Code (through winter 1971 addenda), which did not address RCS leakage tests. A leakage test pressure of 1.06 times nominal operating pressure was specified to provide conservatism.

For the second 10-year inservice inspection (ISI) interval, the licensee committed to perform RCS inservice inspections and tests in accordance with the 1980 Edition of the ASME Boiler and Pressure Vessel (through winter 1981 addenda). IWA-5000 of that Edition requires RCS leakage tests be performed at operating pressure (2155 psig) following normal openings.

The licensee indicates that RCS leakage testing requires operators to manually control RCS pressure at 2285 psig for up 4 hours. The reactor protection system (RPS) RCS high-pressure setpoint is 2355 psig. Performance of the

leakage test at the nominal operating pressure of 2155 psig would decrease the likelihood of RPS actuation during the test.

Additionally, surveillance testing at the reduced pressure will demonstrate the integrity of the RCS pressure boundary following normal openings in accordance with the ASME Boiler and Pressure Vessel Code.

Since the tests will be conducted in accordance with IWA-5000 of the 1980 Edition of the ASME Boiler and Pressure Vessel Code, which allows RCS leakage tests to be performed at nominal operating pressure (2155 psig), and since the nominal operating pressure reduces the likelihood of RPS actuation without reducing the safety margin, the staff concludes that the proposed changes are acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Arkansas State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 30194). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: V. Gaddy

Date: August 2, 1993