

October 18, 1990

Docket No. 50-313

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 NO.136 TO FACILITY OPERATING LICENSE  
NO. DPR-51 - ARKANSAS NUCLEAR ONE, UNIT 1 (TAC NO. 76176)

The Commission has issued the enclosed Amendment No. 136 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 (TS) in response to your application dated March 2, 1990.

The amendment adds requirements to Specification 4.21.1 for surveillance testing of the Hallway E1 372 (Zone 98-J) Sprinkler System and the Condensate Demineralizer Area Sprinkler System (the Bases are also changed to reflect these new requirements). The amendment also standardizes the surveillance requirements for all of the sprinkler systems in Specification 4.21.1.

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, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No.136 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

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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,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

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

Enclosures:

1. Amendment No. 136 to DPR-51
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Neil S. Carns  
Entergy Operations, Inc.

Arkansas Nuclear One, Unit 1

cc:

Mr. Early Ewing, General Manager  
Technical Support and Assessment  
Arkansas Nuclear One  
Route 3 Box 137G  
Russellville, Arkansas 72801

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

Mr. Jerry Yelverton  
Director Nuclear Operations  
Arkansas Nuclear One  
Route 3 Box 137G  
Russellville, Arkansas 72801

Mr. Gerald Muench  
Vice President Operations Support  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, Mississippi 39286

Mr. Nicholas S. Reynolds  
Winston & Strawn  
1400 L Street, N.W.  
Washington, D.C. 20005-3502

Mr. Robert B. McGehee  
Wise, Carter, Child & Caraway  
P. O. Box 651  
Jackson, Mississippi 39205

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
1700 Rockville Pike, Suite 525  
Rockville, Maryland 20852

Mr. Tom W. Nickels  
Arkansas Nuclear One  
Route 3, Box 137G  
Russellville, Arkansas 72801

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
1 Nuclear Plant Road  
Russellville, Arkansas 72801

Admiral Kinnaird R. McKee, USN (Ret)  
Post Office Box 41  
Oxford, Maryland 21654

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

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 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 136  
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 dated March 2, 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.

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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. 136, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

*Theodore R. Quay*

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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 18, 1990

ATTACHMENT TO LICENSE AMENDMENT NO.136

FACILITY OPERATING LICENSE NO. DPR-51

DOCKET NO. 50-313

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

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## 4.21 SPRINKLER SYSTEMS

### Applicability

Applies to surveillance of the sprinkler systems which are required to be operable by Specification 3.18.

### Objective

To assure that the various sprinkler systems are available and operable when needed.

### Specification

- 4.21.1 The sprinkler systems located in the condensate demineralizer area, the four reactor building cable penetration areas, the two emergency diesel generator rooms, the two diesel generator fuel vaults, four cable penetration rooms, cable spreading room, and Hallway E1 372 (Zone 98-J) shall be demonstrated operable:
- a. At least once per 31 days by verifying that each system is aligned to the fire pumps;
  - b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel;
  - c. At least once per 18 months by inspection of the spray nozzles and headers to verify their integrity.

### Bases

The condensate deminealizer area sprinkler system is a wet pipe system actuated only by heat action on the fusible head sprinkler.

The sprinkler systems in the four Reactor Building cable penetration areas are preaction closed-head (fusible head) systems which must be remotely charged from the control room.

The sprinkler systems in the two emergency diesel generator rooms and four cable penetration rooms are automatic preaction closed-head (fusible head) systems which are actuated by detection in the area or remote manual operation from the control room.

The sprinkler systems in the two diesel generator fuel vaults are automatic deluge systems which are actuated by smoke detectors in the area or remote manual operation from the control room.

The sprinkler system in Hallway E1 372 (Zone 98-J) and cable spreading room are automatic deluge systems which are actuated by detection in the area or remote manual operation from the control room.

The required inspections will assure availability of the various sprinkler systems when they are needed.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 136 TO

FACILITY OPERATING LICENSE NO. DPR-51

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT NO. 1

DOCKET NO. 50-313

INTRODUCTION

By letter dated March 2, 1990, Arkansas Power and Light Company (AP&L) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-51 for Arkansas Nuclear One, Unit 1 (ANO-1). The proposed amendment would constitute several changes to Section 4.21 of the Arkansas Nuclear One, Unit 1 (ANO-1) Technical Specifications. Specifications 4.21.1 and 4.21.2 would be deleted and 4.21.3 would be renumbered to 4.21.1. All of the sprinkler systems previously covered by Specifications 4.21.1, 4.21.2, and 4.21.3 would be included in the new 4.21.1 Specification. Requirements for surveillance testing of the Hallway E1 372 (Zone 98-J) Sprinkler System and the Condensate Demineralizer Area Sprinkler System would be added to Specification 4.21.1. The Bases would also be changed to reflect these new requirements. In addition, the amendment would revise the Bases to more accurately describe the sprinkler systems of the emergency diesel generator room, diesel generator fuel vault, cable spreading room, and four cable penetration rooms as installed, and the amendment would also standardize the surveillance requirements for these systems.

EVALUATION

Section 3.18, Fire Suppression Sprinkler System, requires that sprinkler systems are operable to ensure that fire suppression is available to safety-related equipment located in each of the four reactor building cable penetration areas, each of the four cable penetration rooms, each of the two emergency diesel generator rooms, the cable spreading room, each of the two diesel generator fuel vaults, Hallway E1 372, and the condensate demineralizer area. However, no surveillance requirements for Hallway E1 372 and the condensate demineralizer area existed in Section 4.21. AP&L proposed to revise Section 4.21 to include surveillance requirements for Hallway E1 372 (Zone 98-J) and the condensate demineralizer area. The staff finds the inclusion of the surveillance requirements acceptable because the revised TS will ensure that the functionality of the sprinkler system is maintained in all required areas.

The revised Specification 4.21.1 will demonstrate operability by verifying that each system is aligned to the fire pump at least once every 31 days, by requiring that the testable valves in the flow path for each system are cycled once per 12 months, and by inspecting the spray nozzles and headers for each system



once per 18 months. The staff finds the revised specification to be acceptable because it adds requirements for additional surveillances of the specified fire protection systems and it standardizes the surveillance requirements for these systems.

Regarding the Bases, the staff informed the licensee that the Bases proposed in the March 2, 1990 letter, which described the different types of sprinkler systems, would benefit from some additional minor clarifications to ensure that the descriptions are accurate and consistent. The licensee agreed with the staff's suggestion and verbally proposed several minor revisions to the Bases. The staff has reviewed these revisions and finds them to be acceptable as well. These revisions are reflected in the amended page.

#### ENVIRONMENTAL CONSIDERATION

The amendment involves a change in a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The 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 exposures. 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. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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.

#### 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: October 18, 1990

Principal Contributors: L. Tran  
T. Alexion