

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

ARKANSAS POWER AND LIGHT COMPANY

DOCKET NO. 50-368

ARKANSAS NUCLEAR ONE, UNIT 2

FACILITY OPERATING LICENSE

Amendment No. 7 License No. NPF-6

- 1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The issuance of this license amendment to Arkansas Power and Light Company (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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 regulations of the Commission; with the exception of those exemptions granted by Amendment No. 1 to NPF-6:
 - 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.
- Accordingly, the amended Facility Operating License No. NPF-6 is hereby amended by changing the Technical Specifications as indicated in Attachment 1 to this license amendment and by amending Paragraphs 2.C.(1), 2.C.(2) and 2.C.(3) of Facility Operating License No. NPF-6 as follows:
 - 2.C.(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2815 megawatts thermal. Prior to attaining the power level Arkansas Power and Light Company shall comply with the applicable conditions identified in Paragraph 2.C.(3) below and complete the preoperational tests, startup tests. and other items identified in Attachment 2 to this license amendment in the sequence specified. Attachment 2 is an integral part of this license amendment.

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- 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
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- Accordingly, the amended Facility Operating License No. NPF-6 is hereby amended by changing the Technical Specifications as indicated in Attachment 1 to this license amendment and by amending Paragraphs 2.C.(1), 2.C.(2) and 2.C.(3) of Facility Operating License No. NPF-6 as follows:

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The Technical Specifications contained in Appendices A & B, as revised through Amendment No. 7 are hereby incorporated in license NPF-6. Arkansas Power and Light Company shall operate the facility in accordance with the Technical Specifications.

2.C.(3) Additional Conditions

The following conditions, numbered as they were identified in Amendment No. 1 to the license have been changed as noted below:

(e) Fire Protection

Paragraph 2.C.(3) (e) of the license is amended by a change in the implementation date for item 3.3 "Protection From Water Spray" from September 1, 1978 to prior to startup following the first regularly scheduled refueling outage.

(i) Containment Radiation Monitor

Paragraph 2.C.(3)(i) of License No. NPF-6 is hereby amended to read as follows:

The licensee shall, prior to July 31, 1980 submit for Commission review and approval documentation which establishes the adequacy of the qualifications of the containment radiation monitors located inside the containment and shall complete the installation and testing of these instruments to demonstrate that they meet the operability requirements of Technical Specification No. 3.3.3.6.

(j) Environmental Qualifications of Safety Related Instrumentation

The conditions specified in items (1) and (2) of paragraph 2.C.(3)(j) have been resolved and are, therefore, deleted.

(k) Core Protection Calculator System (CPCS)

Items (1), (2), (3) and (4) of paragraph 2.C.(3)(k) have been superceded by the following conditions. In addition, a copy of the startup report addressed by these conditions shall be submitted to the Director of the Division of Project Management in the Office of Nuclear Reactor Regulation.

(1) CPCS Position No. 1, Power Distribution Algorithm

The startup report required by Technical Specification No. 6.9.1 shall be supplemented to include the results of the startup verification testing which demonstrates the conservatism of the calculation of the power distribution uncertainty factors. The startup testing shall be performed in accordance with information previously submitted by the licensee, as identified in Section D.3.5 of the Staff's Safety Evaluation Report and Supplements Number 1 and 2 thereto, in support of the resolution of CPCS Position No. 1.

(2) CPCS Position No. 5, Cable Separation

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The startup report required by Technical Specification No. 6.9.1 shall be supplemented to include the results of measurements from the startup testing program which demonstrates that noise or electromagnetic interference effects from non-Class IE circuits which are in close proximity to Class IE circuits are within previously established acceptable ranges. These measurements shall be performed in accordance with information previously submitted by the licensee, as identified in Section D.4.1.2 of the Safety Evaluation report and Supplements Number 1 and 2 thereto, in support of the resolution of CPCS Position No. 5.

(3) CPCS Position No. 12, Electrical Noise and Isolation

The startup report required by Technical Specification No. 6.9.1 shall be supplemented to include the results of measurements from the startup testing program which demonstrates that noise or electromagnetic interference effects upon the operation of the optical isolators are within previously established acceptable ranges. These measurements shall be performed in accordance with information previously submitted by the licensee, as identified in Sections D.4.1.4 and D.4.4.4 of Supplements Number 1 and 2 to the Safety Evaluation Report, in support of the resolution of CPCS Position No. 12.

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(4) <u>CPCS Position No. 19, Software Change Procedure</u> Qualification

The licensee shall not make any changes to the CPCS software until the Commission has reviewed and approved the licensee's responses to items (1), (2), (3) and (4) as identified in the Summary Subsection of Section D.4.4.6 of Supplement No. 2 to the Safety Evaluation Report.

(n) Fire Barrier Testing

The condition specified in paragraph 2.C.(3)(n) has been resolved and is, therefore, deleted.

(o) Offsite Power System

The changes needed for protection from degraded offsite power voltage have been completed. The condition specified in paragraph 2.C.3(o) has been resolved and is, therefore, deleted.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director Division of Project Management) Office of Nuclear Reactor Regulation

Attachments:

- 1. Changes to the Technical Specifications
- Preoperational Tests, Startup Tests and Other Items Which Must be Completed By the Indicated Operational Mode

Date of Issuance: DEC 1 1978

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ATTACHMENT 1 TO LICENSE AMENDMENT NO. 7

FACILITY OPERATING LICENSE NO. NPF 6

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Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. Revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Corresponding overleaf pages are also provided to maintain document completeness.

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Pages

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INSTRUMENTATION

POST-ACCIDENT INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.6 The post-accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

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- a. With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, either restore the inoperable channel to OPERABLE status within 30 days, or be in HOT SHUTDOWN within the next 12 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.6 Each post-accident monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-10.

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TABLE	4.3-10
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POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INST	RUMENT	CHANNEL	CHANNEL CALIBRATION
1.	Containment Pressure	м	R
2.	Containment Radiation Monitors*	м	R
3.	Pressurizer Pressure	м	R
4.	Pressurizer Water Level	м	R
5.	Steam Generator Pressure	N	R
6.	Steam Generator Water Level	м	R
7.	Refueling Water Tank Water Level	м	R
8.	Containment Sump Water Level	м	R

*This requirement may be satisfied through July 31, 1980 by the use of portable radiation monitors, and by substituting a source check for the channel check and by substituting an instrument calibration for the channel calibration.

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ATTACHMENT 2 TO AMENDMENT NO. 7

LICENSE NO. NPF-6

Other Items Which Must be Completed Prior to Proceeding To Succeeding Operational Modes

This attachment identifies certain preoperational tests, startup tests, and other items which must be completed to the Commission's satisfaction prior to proceeding to certain specified Operational Modes. Arkansas Power & Light Company shall not proceed beyond the authorized Operational Modes without prior written authorization from the Commission.

- A. The following items must be completed prior to proceeding to Operational Mode 2 (Initial Criticality).
 - Completion of significant startup punchlist items which affect the operability of the following:
 - Sampling System
 - Auxiliary Building H&V (1)
 - Emergency Feedwater System (2)
 - Plant Protective System (4)
 - Reactor Coolant System (3)
 - Waste Gas System (1)
 - Area Radiation Monitors (2)
 - Air & Gas Radiation Monitors (6)
 - Safety Injection System (2)
 - Liquid Radwaste System (4)
 - 2. Completion of the following Preoperational Tests:

2.083.01 Main Steam Supply and Safety Relief Valves

- 3. Closeout of outstanding Startup Program Test Deficiencies.
- 4. Approval and issuance of the following procedure:

2.800.01 App. U Unit Load Transient Test

 Resolution of main feedwater line break potential within the containment piping penetration room.

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- 6. Resolution of the following items relating to radiation protection.
 - Complete installation and calibration of health physics monitoring equipment.
 - b. Complete calibration of area radiation monitors.
 - c. Complete calibration of process radiation monitors.
- 7. Complete hanger installation.
- Complete installation of independent DC power supplies to the series containment penetration breakers.
- Resolution of discrepancies identified in the Facility Operating Procedures.
- Resolution of test deficiencies relating to the failure of the Hydrogen Purge System to meet FSAR acceptance criterion. These deficiencies include:
 - Failure of the filters to pass the Freon-112 test.
 - Failure of the system to meet specified flow rate.
- 11. Resolution of LPSI Pump Motor Failure.
- 12. Resolution of loose part in safety injection system.
- 13. Conformance to GDC-17 offsite power deficiencies.
- 14. Resolution of inverter deficiencies.
- 15. Chloride swipes within containment.
- 15. Resolution of Diesel Generator No. 2 failure.
- 17. Resolution of CRD-58 failure.
- The following items must be completed prior to proceeding to Operational Mode 1 (Power Operation).
 - Completion of significant startup punchlist items which affect the operability of the following:

- Control Room H&V (1)
- Miscellaneous H&V (1)
- Feedwater System (1)
 Steam Generators (2)
- Fuel Pool and Auxiliaries (8) .
- Waste Gas System (1) -
- Solid Radiation Waste System (4)
- Main Steam System (2)
- 2. Resolution of the following outstanding operations punchlist items:
 - Instrumentation in place for CECEC Code verification.

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