



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 192  
License No. DPR-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated April 14, 1989, as supplemented by April 14, 1989, January 30, 1990, and 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 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, Facility Operating License No. DPR-52 is amended by changes to Appendix A (i.e. Technical Specifications) as indicated in the attachment to this license amendment; paragraph 2.C.(2) is amended and paragraph 2.C.(5)(a)\* is added to the license to read as follows:

(2) Technical Specifications

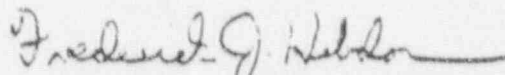
The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 192, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

- (5)(a) Browns Ferry Nuclear Plant shall implement and maintain all provisions of the Appendix R Safe Shutdown Program as described in the submittal dated April 14, 1989, as supplemented by December 11, 1990, and as approved in the NRC Safety Evaluation dated March 6, 1991, subject to the following provision:

The licensee may make changes to the approved Appendix R Safe Shutdown Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license amendment is effective as of its date of issuance, and shall be implemented within 60 days from the date of issuance but no later than restart of Unit 2.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director  
Project Directorate II-4, NRR  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachments:

1. Pages 4 and 4a of license
2. Changes to the Technical Specifications

Date of Issuance: March 6, 1991

\* Pages 4 and 4a of the License are attached, for convenience, for the composite License to reflect this change.

- (3) In the operation of the facility, the licensee shall, pursuant to the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), comply with all applicable thermal water quality standards of the State of Alabama and the United States.
- (4) The licensee is hereby granted an exemption from the requirements of General Design Criterion 4 with respect to high energy pipes outside containment in accordance with the condition set forth in the Technical Specifications, Section 3.6.G.2 which requires completion of those items listed in 'Concluding Report on the Effects of Postulated Pipe Failure Outside of Containment for the Browns Ferry Nuclear Plant Units 2 and 3' and related to Unit 2 prior to startup of Unit 2 following the first refueling outage."
- (5) The facility may be modified as described in Section X of 'Plan for Evaluation, Repair, and Return to Service of Browns Ferry Units 1 and 2 (March 22, 1975 Fire)' dated April 13, 1975, and revisions thereto.

The facility may be modified by plugging the bypass flow holes in the lower core support plate as described in Browns Ferry Nuclear Plant Units 1 and 2 Safety Analysis Report for Plant Modifications to Eliminate Significant In-Core Vibrations (NEDC-21091), October 1975. The reactor shall not be operated with the plugs installed in the lower core support plate bypass flow holes without further authorization by the NRC."

- (5)(a) Browns Ferry Nuclear Plant shall implement and maintain in effect all provisions of the approved Appendix R Safe Shutdown Program as described in submittal dated April 14, 1989, and as revised in submittal dated December 11, 1990, and as approved in NRC Safety Evaluation dated March 6, 1991, subject to the following provision:

The licensee may make changes to the approved Appendix R Shutdown Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (6) The facility may be modified by drilling bypass flow holes in Type 2 and Type 3 fuel assemblies as described in NEDO-21091, "Browns Ferry Nuclear Plant, Units 1 & 2 Safety Analysis Report for Plant Modifications to Eliminate Significant In-Core Vibrations; and NEDE-21156, "Supplemental Information for Plant Modification to Eliminate Significant In-Core Vibrations," dated January 1976.
  
- (7) The facility may be modified as described in 'Browns Ferry Nuclear Plant Units 1 and 2 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications for Performance Improvement (December 1975)' submitted by application dated December 1, 1975 and supplements dated February 12, 1976, March 24, 1976, March 30, 1976, May 21, 1976, June 11, 1976, and July 21, 1976."

ATTACHMENT TO LICENSE AMENDMENT NO.

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and certain marginal lines indicating the area of change. Overleaf\* pages are provided to maintain document completeness.

REMOVE

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6.0-7  
6.0-8  
6.0-13  
6.0-14  
6.0-19  
6.0-20

INSERT

1.0-12a  
1.0-12b  
6.0-7\*  
6.0-8  
6.0-13\*  
6.0-14  
6.0-19\*  
6.0-20

DEFINITIONS (Cont'd)

NN. Appendix R Safe Shutdown Program

BFN has developed an Appendix R Safe Shutdown Program. This Program is to ensure that the equipment required by the Appendix R Safe Shutdown Analysis is maintained and demonstrated functional as follows:

1. The functional requirements of the Safe Shutdown systems and equipment, as well as appropriate compensatory measures should these systems/components be unable to perform their intended function are outlined in Section III of the Program.
2. Testing and monitoring of the Appendix R Safe Shutdown systems and equipment are defined in Section V of the Program.
3. Changes made to the BFN Appendix R Safe Shutdown Program will be processed in accordance with License Condition 2.C.5.(a).

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6.5.1.4 For expedited meetings, when it is not practical to convene as a group, the chairman or alternate chairman may conduct committee business by polling the members individually (by telephone or in person) or via a serialized review.

#### QUORUM

6.5.1.5 The quorum necessary for the PORC to act in a formal meeting shall consist of the chairman or alternate chairman and at least five members or their alternates. Members shall be considered present if they are in telephone communication with the committee.

#### RES. NSIBILITIES

6.5.1.6 The PORC shall be responsible for the activities listed below. The PORC may delegate the performance of reviews, but will maintain cognizance over and responsibility for them, e.g., subcommittees.

- a. Review of administrative procedures for the control of the technical and cross-disciplinary review of (1) all procedures required by Specification 6.8.1.1, and changes thereto, (2) any other procedures and changes thereto determined by the Plant Manager to affect nuclear safety.
- b. Review of the administrative procedures required by Appendix A of Regulatory Guide 1.33, Revision 2, February 1978 and changes thereto.
- c. Review of emergency operating procedures and changes thereto.
- d. Review implementing procedures of the Radiological Emergency Plan and the Industrial Security Program.

- e. Review of all proposed changes to the Technical Specifications.
- f. Review of safety evaluation for proposed tests or experiments to be completed under the provisions of 10 CFR 50.59
- g. Review proposed changes to the Radiological Effluent Manual.
- h. Review adequacy of the Process Control Program and Offsite Dose Calculation Manual at least once every 24 months.
- i. Review changes to the radwaste treatment systems.
- j. Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendation, and disposition of the corrective action to prevent recurrence to the Senior Vice President, Nuclear Power, and to the Nuclear Safety Review Board.
- k. Review of all safety evaluations for modifications to structures, systems or components that affect nuclear safety to verify that such actions did not constitute an unreviewed safety question as defined in 10 CFR 50.59, or requires a change to these Technical Specifications.
- l. A review of the Appendix E Safe Shutdown Program and implementing procedures. Submit all PORC approved changes to NSRB.

## REVIEW

### 6.5.2.7 The NSRB shall review:

- a. The safety evaluations for: (1) changes to procedures, equipment or systems, and (2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.
- b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.  
  
Proposed changes to Technical Specifications or this Operating License.
- e. Violations of Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- f. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- g. All Reportable Events
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety; and
- i. Reports and meeting minutes of the PORC.

## AUDITS

6.5.2.8 Audits of unit activities shall be performed under the cognizance of the NSRB. These audits shall encompass:

- a. The conformance of plant operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire plant staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in site equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months.
- e. The Site Radiological Emergency Plan and implementing procedures at least once every 12 months.
- f. The Plant Physical Security Plan and implementing procedures at least once every 12 months.
- g. Any other area of site operation considered appropriate by the NSRB or the Senior Vice President, Nuclear Power.
- h. The fire protection programmatic controls and Appendix R Safe Shutdown Program including the implementing procedures at least once per 24 months.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Senior Vice President, Nuclear Power and the NSRB shall be notified within 24 hours.
- b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the POFC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence.
- c. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB, and the Senior Vice President, Nuclear Power within 14 days of the violation.
- d. Critical operation of the unit shall not be resumed until authorized by the Commission.

## 6.8 PROCEDURES/INSTRUCTIONS AND PROGRAMS

### 6.3.1 PROCEDURES

6.8.1.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Limitations on the amount of overtime worked by individuals performing safety-related functions in accordance with NRC Policy statement on working hours (Generic Letter No. 82-12).
- c. Surveillance and test activities of safety-related equipment.
- d. Security plan implementation.
- e. Emergency plan implementation.
- f. Fire Protection Program and Appendix B Safe Shutdown Program implementation.
- g. Radiological Effluent Manual implementing procedures.
- h. Process Control Program (PCP).
- i. Offsite Dose Calculation Manual.
- j. Administrative procedures which control technical and cross-disciplinary review.