Docket Nos.: 50-259/260/296

Mr. S. A. White Manager of Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37401

Dear Mr. White:

The Commission has issued the enclosed Amendment Nos. 129, 124, and 100 to Facility Operating License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3. These amendments are in response to your application dated February 12, 1986 (TVA BFNP TS 21/).

The amendments revise the Technical Specifications to clarify the limiting conditions for operation regarding seismic restraints, supports and snubbers.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Richard J. Clark, Project Manager BWR Project Directorate #2 Division of BWR Licensing

Enclosures:

Amendment No. 129 to License No. DPR-33

Amendment No. 124 to License No. DPR-52

Amendment No. 100 to License No. DPR-68

4. Safety Evaluation

cc w/enclosures: See next page

JTaylor, IE BHayes, OI SRichardson, IE DISTRIBUTION: **HDenton** EJordan DVassallo **HThompson** Docket File RBernero NRC PDR **BGrimes** OPA MGrotenhuis SNorris **EButcher** Local PDR RC1ark TBarnhart (12) LFMB Gray File JPartlow. OGC-Bethesda **WJones** NThompson ACRS (10) SPQWeise, RII SRConnelly, OIA GZech, RII LHarmon JHolonich. **CStahle** TKenyon BJYoungblood SConnelly, OIA FCantrell, RII RWessman TAlexion

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Mr. S. A. White Tennessee Valley Authority

cc:

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Regional Administrator, Region II U. S. Nuclear Regulatory Commission 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303

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Robert L. Lewis, Manager, RFNP Tennessee Valley Authority Post Office Box 2000 Decatur, Alabama 35602



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 129 License No. DPR-33

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 12, 1986, 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.
- 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-33 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 129, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller, Director BWR Project Directorate #2 Division of BWR Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: August 19, 1986

FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Revise Appendix A as follows:

1. Remove the following page and replace with identically numbered page.

185

2. The marginal lines on this page denotes the area being changed.

1.6 PRIMARY SYSTEM BOUNDARY

H. Science Restraints, Supports, and Snubbers

During all modes of operation, all seismic restraints, snubbers, and supports shall be operable except as noted in 3.6.H.1. All safety-related snubbers are listed in Surveillance Instruction EF SI 4.6.H.

1. With one or more seismic restraint, support, or snubber inoperable on a system that is required to be operable in the current plant condition, within 72 hours replace or restore the inoperable seismic restraint(s), support(s), or snubber(s) to operable status and perform an engineering evaluation on the attached component or declare the attached system inoperable and follow the appropriate Limiting Condition statement for that system.

4.6 PRIMARY SYSTEM BOUNDARY

N. Seismic Reserrings, Supports, and Snubbers

The surveillance requirements of paragraph 4.6.G are the only requirements that apply to any seismic restraint or support other than shubbers.

Each safety-related snubber shall be demonstrated OPERABLE BY performance of the following augumented inservice inspection program and the requirements of Specification 3.6.8/4.6.8. These snubbers are listed in Surveillance Instruction BT ST 4.6.8.

1. Inspection Croups

The monthers may be caregorized into two major groups based on whether the snubbers are accessible or inaccessible during reactor operation. These major groups may be further subdivided into groups based on design, environment, or other features which may be expected to affect the operability of the unubbers within the group. Each group may be inspected independently in accordance with 4.6.H.2 through 4.6.H.9.

2. Visual Inspection, Schedule. and Lot Size

The first inservice visual inspection of snubbers not previously included in these technical specifications and whose visual inspection has not been performed and documented previously, shall be performed within six months for accessible snubbers and before resuming power after the first refueling outage



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. 124 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 February 12, 1986, 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.
- 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-52 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.124, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller, Director BWR Project Directorate #2 Division of BWR Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: August 19, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 124

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Revise Appendix A as follows:

1. Remove the following page and replace with identically numbered page.

185

2. The marginal lines on this page denotes the area being changed.

1.6 FRINARY SYSTEM BOUNDARY

H. Selemic Rescretate Supports, and Shubbers

During all modes of operation, all seismic restraints, snubbers, and supports shall be operable except as noted in 3.6.H.1. All safety-related snubbers are listed in Surveillance Instruction BF SI 4.6.H.

1. With one or more seismic restraint, support, or snubber inoperable on a system that is required to be operable in the current plant condition, within 72 hours replace or restore the inoperable seismic restraint(s), support(s), or snubber(s) to operable status and perform an engineering evaluation on the attached component or declare the attached system inoperable and follow the appropriate Limiting Condition statement for that system.

4.6 PRIMARY SYSTEM BOUNDARY

H. Seismic Restr into, Supports, and Shubbers

The surveillance requirements of paragraph 4.5.6 are the only requirements that apply to any seismic restraint or support other than snubbers.

Each safety-related snubber shell be demonstrated OPERABLE By performance of the following augmented inservice inspection program and the requirements of Specification 3.6.8/4.c.8. Those southers are fluted in Surveillance Instruction BT SI 4.5.8.

1. Inspection Groups

The sambhers may be categorized into two major groups based on whether the shubbers are accessible or inaccessible during reactor operation. These major groups may be further subdivided into groups based on design, environment, or other features which may be expected to affect the operability of the snubbers within the group. Each group may bu inspected independently in accordance with 4.5.2.2 through 4.6.H.9.

2. Visual Inspection, Schedule. and Loc Size

The first inservice visual inspection of snubbers not previously included in these technical specifications and whose visual inspection has not been performed and documented previously, shall be performed within six months for accessible snubbers and before resuming power after the first refueling outage



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100 License No. DPR-68

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 12, 1986, 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.
- 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-68 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 100, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller, Director BWR Project Directorate #2 Division of BWR Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: August 19, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 100 FACILITY OPERATING LICENSE NO. DPR-68 DOCKET NO. 50-296

Revise Appendix A as follows:

1. Remove the following page and replace with identically numbered page.

198

2. The marginal lines on this page denotes the area being changed.

3.6 FRIMARY SYSTEM BOUNDARY

H. <u>Sciemic Restreints, Supports,</u> and Snubbers

During all modes of operation, all seismic restraints, snubbers, and supports shall be operable except as noted in 3.6.H.1. All safety-related snubbers are listed in Surveillance Instruction BF SI 4.6.H.

1. With one or more seismic restraint, support, or snubber inoperable on a system that is required to be operable in the current plant condition, within 72 hours replace or restore the inoperable seismic restraint(s), support(s), or snubber(s) to operable status and perform an engineering evaluation on the attached component or declare the attached system inoperable and follow the appropriate Limiting Condition statement for that system.

4.6 PRIMARY SYSTEM BOUNDARY

N. Seismic Restraints, Supports, and Snubbers

The surveillance requirements of paragraph 4.6.6 are the only requirements that apply to any seismic restraint or support other than snubbers.

Each safety-related snebber shall be demonstrated OPERABLE BY performance of the following augmented inservice inspection program and the requirements of Specification 3.5.8/4.6.8.
These snobbers are listed in Surveillance Instruction BF SI 4.6.8.

1. <u>Inspection Groups</u>

The ambhers may be caregorized into two major groups based on whether the snubbers are accessible or inaccessible during reactor operation. These major groups may be further subdivided into groups based on design, environment, or other features which may be expected to affect the operability of the snubbers within the group. Each group may be inspected independently in accordance with 4.6.H.2 through 4.6.H.9.

2. Visual Inspection, Schedule. and Loc Size

The first inservice visual inspection of snubbers not previously included in these technical specifications and whose visual inspection has not been performed and documented previously, shall be performed within six months for accessible snubbers and before resuming power after the first refueling outage



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 129 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 124 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 100 TO FACILITY OPERATING LICENSE NO. DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKET NOS. 50-259, 50-260 AND 50-296

1.0 INTRODUCTION

By letter dated February 12, 1986 (TVA BFNP TS-217), the Tennessee Valley Authority (the licensee or TVA) requested amendments to Facility Operating License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3. The proposed amendments would change the Technical Specifications to clarify the limiting conditions for operation regarding seismic restraints, supports and snubbers.

2.0 EVALUATION

The proposed amendments clarify the requirements for seismic restraints, supports, and snubbers by adopting the requirements of the Standard Technical Specifications. This would permit the plant, during all modes of operation, to replace or restore inoperable seismic restraints, supports, and snubbers within a 72-hour period of time after they were discovered. It also requires an engineering analysis to show that the supported component(s) has not been damaged by the inoperable snubber(s). Since this is a provision in the Standard Technical Specifications, the addition of this requirement is acceptable.

The licensee also proposed to remove the following requirements from the present Technical Specifications:

4.6.4.2 Visual Inspection, Schedule, and Lot Size

The first inservice visual inspection of snubbers not previously included in these technical specifications and whose visual inspection has not been performed and documented previously, shall be performed within six months for accessible snubbers and before resuming power after the first outage.

The purpose of this requirement was to assure that any safety-related snubbers inadvertently missed during the first inservice visual inspection be visually inspected within a certain time frame. Since these plants have been operated several fuel cycles, the deletion of this requirement, which applies only to the first visual inspection of snubbers, is therefore acceptable.

As noted above, the revised Technical Specifications would permit a unit to startup with an inoperable seismic restraint, support or snubber (SRSS), which is consistent with the BWR Standard Technical Specifications (NUREG-0123). At a glance, this might seem to be at variance with the long standing compliance-based policy that any plant repairs should be completed before a plant starts up, even though some period of time might be allowed to fix the item it it becomes non-functional during operation. (For SRSSs, this period of time is 72 hours). If a SRSS is inoperable, it technically renders the system it is protecting inoperable. The Browns Ferry Technical Specifications (TS) contain specific restrictions on what systems must be operable prior to startup. For example, Section 3.5.A.1 of the TS on the core spray system (CSS) states: "The CSS shall be operable prior to startup from a cold condition." If a SRSS on the CSS were inoperable, the unit could not startup until the SRSS was repaired. As TVA stated in the justification for the proposed change to the TS in the submittal of February 12, 1986, "instances of starting the reactor prior to completing a SRSS repair would rarely occur" because of the present restrictions in the TS on what systems (vs specific components of these systems) must be operable prior to startup. The proposed revisions to the TS is not inconsistent with having plants ready for sustained operation before startup from a shutdown condition and is acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

The amendments change 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 staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there should be no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 amendments.

4.0 CONCLUSION

We have 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.

Principal Contributor: H. Shaw, R. Clark

Dated: August 19, 1986

Docket Nos.: 50-259/260/296

Mr. S. A. White Manager of Nuclear Power Tennessee Valley Authority 6N 38A Lookout Place 1101 Market Street Chattanooga, Tennessee 37401

Dear Mr. White:

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The amendments revise the Technical Specifications to clarify the limiting conditions for operation regarding seismic restraints, supports and snubbers.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Richard J. Clark, Project Manager BWR Project Directorate #2 Division of BWR Licensing

Enclosures:

- 1. Amendment No. 129 to License No. DPR-33
- 2. Amendment No. 124 to License No. DPR-52
- 3. Amendment No. 100 to License No. DPR-68
- 4. Safety Evaluation

cc w/enclosures: See next page

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