

DO NOT REMOVE

August 19, 1986

Docket Nos.: 50-259/260/296

*Posted  
Amdt. 124  
to DPR-52  
(See Collection letter  
of 12-12-86)*

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:

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

DISTRIBUTION:

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

OFFICIAL RECORD COPY

DBL:PD#2 SNorris:rs 8/7/86	DBL:PD#2 RJClark 8/7/86	DBL:PD#2 MGrotenhuis 8/11/86 8/11/86	OGC J. G. Uberg 8/10/86	DBL:PD#2 DMeyer 8/11/86
----------------------------------	-------------------------------	---	-------------------------------	-------------------------------

Mr. S. A. White  
Tennessee Valley Authority

cc:

H. S. Sanger, Jr., Esquire  
General Counsel  
Tennessee Valley Authority  
400 Commerce Avenue  
E 11B 330  
Knoxville, Tennessee 37902

Mr. Ron Rogers  
Tennessee Valley Authority  
5N 130B Lookout Place  
Chattanooga, Tennessee 37402-2801

Chairman, Limestone County Commission  
Post Office Box 188  
Athens, Alabama 35611

Ira L. Meyers, M.D.  
State Health Officer  
State Department of Public Health  
State Office Building  
Montgomery, Alabama 36130

Mr. K. W. Whitt  
E3A8  
400 West Summit Hill Drive  
Tennessee Valley Authority  
Knoxville, Tennessee 37902

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

Mr. Steven Roessler  
U. S. Nuclear Regulatory Commission  
Reactor Training Center  
Osborne Office Center, Suite 200  
Chattanooga, Tennessee 37411

Browns Ferry Nuclear Plant  
Units 1, 2, and 3

W. C. Bibb  
Site Director, BFNP  
Tennessee Valley Authority  
Post Office Box 2000  
Decatur, Alabama 35602

Resident Inspector  
U. S. Nuclear Regulatory Commission  
Route 2, Box 311  
Athens, Alabama 35611

Mr. Donald L. Williams, Jr.  
Tennessee Valley Authority  
400 West Summit Hill Drive, W10B85  
Knoxville, Tennessee 37902

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

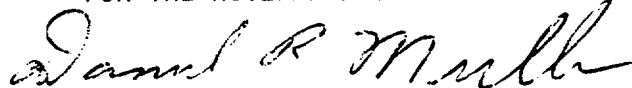
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 12, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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

ATTACHMENT TO LICENSE AMENDMENT NO. 129

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.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

**3.6 PRIMARY SYSTEM BOUNDARY**

**H. Seismic 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 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**

**II. Seismic Restraints, 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 snubbers.

Each safety-related snubber shall be demonstrated OPERABLE BY performance of the following augmented inservice inspection program and the requirements of Specification 3.6.H/4.6.H. These snubbers are listed in Surveillance Instructions BF SI 4.6.H-1 and -2.

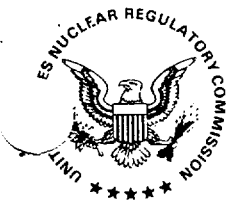
**1. Inspection Groups**

The snubbers may be categorized 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 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) Technical Specifications

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.

**LIMITING CONDITIONS FOR OPERATION**

**SURVEILLANCE REQUIREMENTS**

**3.6 PRIMARY SYSTEM BOUNDARY**

**H. Seismic 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 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 Restraints, 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 snubbers.

Each safety-related snubber shall be demonstrated OPERABLE BY performance of the following augmented inservice inspection program and the requirements of Specification 3.6.H/4.6.H. These snubbers are listed in Surveillance Instructions BF SI 4.6.H-1 and -2.

**1. Inspection Groups**

The snubbers may be categorized 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 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. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100  
License No. DPR-68

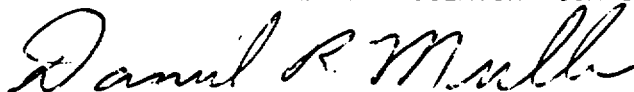
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated February 12, 1986, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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) Technical Specifications

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.

**LIMITING CONDITIONS FOR OPERATION**

**SURVEILLANCE REQUIREMENTS**

**3.6 PRIMARY SYSTEM BOUNDARY**

**H. Seismic 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 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**

**II. Seismic Restraints, 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 snubbers.

Each safety-related snubber shall be demonstrated OPERABLE BY performance of the following augmented inservice inspection program and the requirements of Specification 3.6.H/4.6.H. These snubbers are listed in Surveillance Instructions BF SI 4.6.H-1 and -2.

**1. Inspection Groups**

The snubbers may be categorized 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 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

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.

Correction letter of 12-12-86

As noted above, the revised Technical Specifications would permit a unit to startup with an inoperable seismic restraint, support or scrubber (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 if 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



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:

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:

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

DISTRIBUTION:

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

OFFICIAL RECORD COPY

DBL:PD#2  
SNorris:rs  
8/7/86

DBL:PD#2  
RJClark  
8/7/86

DBL:PD#2  
MGrotenhuis  
8/11/86  
8/11/86

OGC  
J. G. W. Berg  
8/10/86

DBL:PD#2  
DMuller  
8/11/86