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NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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Posted  
Amat. 100  
to DPR-52

August 2, 1984

Docket Nos. 50-259(260)296

Mr. Hugh G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Dear Mr. Parris:

The Commission has issued the enclosed Amendment Nos. 106, 100 and 73 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 June 24, 1983 (TVA BFNP TS 176 Supplement 8).

The amendments change the Technical Specifications related to the suppression chamber drain valves to (1) clarify the correct operating positions for these valves; (2) identify proper action of these valves in an initiating signal; and (3) correct typographical errors in the valve designation numbers.

A copy of the Safety Evaluation is also enclosed.

Sincerely,

Richard J. Clark, Project Manager  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

1. Amendment No. 106 to  
License No. DPR-33
2. Amendment No. 100 to  
License No. DPR-52
3. Amendment No. 73 to  
License No. DPR-68
4. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Hugh G. Parris  
Tennessee Valley Authority  
Browns Ferry Nuclear Plant, Units 1, 2 and 3

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  
400 Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Mr. Charles R. Christopher  
Chairman, Limestone County Commission  
Post Office Box 188  
Athens, Alabama 35611

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

Mr. H. N. Culver  
249A HBD  
400 Commerce Avenue  
Tennessee Valley Authority  
Knoxville, Tennessee 37902

James P. O'Reilly  
Regional Administrator  
Region II Office  
U. S. Nuclear Regulatory Commission  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

U. S. Environmental Protection  
Agency  
Region IV Office  
Regional Radiation Representative  
345 Courtland Street, N. W.  
Atlanta, Georgia 30308

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

George Jones  
Tennessee Valley Authority  
Post Office Box 2000  
Decatur, Alabama 35602

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



UNITED STATES  
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TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 106  
License No. DPR-33

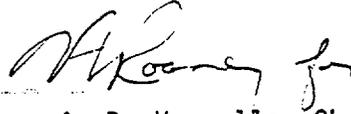
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated June 24, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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. 106, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 106

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.  
250
2. The marginal lines on these page denotes the areas being changed.

TABLE 3.7.A  
PRIMARY CONTAINMENT ISOLATION VALVES

Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec.)	Normal Position	Action on Initiating Signal
		Inboard	Outboard			
1	Main steamline isolation valves (PCV-1-14, 26, 37, 65); 1-15, 27, 38, & 52)	4	4	3 < T < 5	0	GC
1	Main steamline drain isolation valves PCV-1-55 & 1-56	1	1	15	0	GC
1 *	Reactor Water sample line isolation valves	1	1	5	C	SC
2	RHRS shutdown cooling supply isolation valves FCV-74-48 & 47	1	1	40	C	SC
2	RHRS - LPCI to reactor FCV-74-53, 67		2	30	C	SC
2	Reactor vessel head spray isolation valves FCV-74-77, 78	1	1	30	C	SC
2	RHRS flush and drain vent to suppression chamber FCV-74-102, 103, 119, & 120		4	20	C	SC
2	Suppression Chamber Drain FCV 75-57, -58		2	15	0**	GC
2	Drywell equipment drain discharge isolation valves PCV-77-15A, & 15B		2	15	0	GC
1	Drywell floor drain discharge isolation valves PCV-77-2A & 2B		2	15	0	GC

\*These valves isolate only on reactor vessel low low water level (470") and main steam line high radiation of Group 1 isolations.

\*\* These valves are normally open when the pressure suppression head tank is aligned to serve the RHR and CS discharge piping and closed when the condensate head tank is used to serve the RHR and CS discharge piping. (See Specification 3.5.H)



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TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 100  
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 June 24, 1983, 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. 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 100

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.  
250
2. The marginal lines on this page denote the areas being changed.

TABLE 3.7.A  
PRIMARY CONTAINMENT ISOLATION VALVES

Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec.)	Normal Position	Action on Initiating Signal
		Inboard	Outboard			
1	Main steamline isolation valves (PCV-1-10, 26, 37, & 51; 1-15, 27, 38 & 52)	4	4	3 < T < 5	0	GC
1	Main steamline drain isolation valves (PCV-1-55 & 1-56)	1	1	15	0	GC
1*	Reactor Water sample line isolation valves	1	1	5	C	SC
2	RRRS shutdown cooling supply isolation valves (PCV-74-48 & 47)	1	1	40	C	SC
2	RRRS - LPCI to reactor (PCV-74-53 & 67)		2	30	C	SC
2	Reactor vessel head spray isolation valves (PCV-74-77 & 78)	1	1	30	C	SC
2	RRRS flush and drain vent to suppression chamber (PCV-74-102, 103, 119, & 120)		4	20	C	SC
2	Suppression Chamber Drain (PCV-75-57 & 58)		2	15	0**	GC
2	Drywell equipment drain discharge isolation valves (PCV-77-15A & 15B)		2	15	0	GC
2	Drywell floor drain discharge isolation valves (PCV-77-2A & 2B)		2	15	0	GC

\*\*These valves are normally open when the pressure suppression head tank is aligned to serve the RHR and CS discharge piping and closed when the condensate head tank is used to serve the RHR and CS discharge piping. (See specification 3.5.11)

\*These valves isolate only on reactor vessel low low water level. (470") and main steam line high radiation of Group 1 isolations.



UNITED STATES  
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WASHINGTON, D. C. 20555

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 73  
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 June 24, 1983, 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. 73, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 73

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.  
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2. The marginal lines on this page denote the areas being changed.

TABLE 3.7.A  
PRIMARY CONTAINMENT ISOLATION VALVES

Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec.)	Normal Position	Action on Initiating Signal
		Inboard	Outboard			
1	Main steamline isolation valves (PCV-1-14, 26, 37, & 51; 1-15, 27, 38 & 52)	4	4	3 < T < 5	0	GC
1	Main steamline drain isolation valves (PCV-1-55 & 1-56)	1	1	15	0	GC
1 *	Reactor water sample line isolation valves	1	1	5	C	SC
2	RHRS shutdown cooling supply isolation valves (PCV-74-48 & 47)	1	1	40	C	SC
2	RHRS - LPCI to reactor (PCV-74-53 & 67)		2	30	C	SC
2	Reactor vessel head spray isolation valves (PCV-74-77 & 78)	1	1	30	C	SC
2	RHRS flush and drain vent to suppression chamber (PCV-74-102, 103, 119, & 120)		4	20	C	SC
2	Suppression Chamber Drain (PCV-75-57 & 58)		2	15	0 **	GC
2	Drywell equipment drain discharge isolation valves (PCV-77-15A & 15B)		2	15	0	GC
2	Drywell floor drain discharge isolation valves (PCV-77-2A & 2B)		2	15	0	GC

\*These valves isolate only on reactor vessel low low water level (470") and main steam line high radiation of Group 1 isolations.

\*\* These valves are normally open when the pressure suppression head tank is aligned to serve the RHR and CS discharge piping and closed when the condensate head tank is used to serve the RHR and CS discharge piping. (See Specification 3.5.11)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 106 TO FACILITY OPERATING LICENSE NO. DPR-33

AMENDMENT NO. 100 TO FACILITY OPERATING LICENSE NO. DPR-52

AMENDMENT NO. 73 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 June 24, 1983 (TVA BFNP TS 176 Supplement 8) 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 requested changes are related to the suppression chamber drain valves and incorporate provisions into the Browns Ferry Technical Specifications that would: 1) clarify the correct operating positions for those valves; 2) identify proper action of these valves on an initiating signal; and 3) correct typographical errors in the valve designation numbers. Changes one and two are applicable to Units 1, 2 and 3 and change three is only applicable to Unit 1.

2.0 Evaluation

The suppression chamber drain valves FCV 75-57 and 75-58 are normally open valves which permit the ECCS keep fill pumps and radioactive waste drain pumps (when properly aligned manually) to take a suction on the suppression pool through the Core Spray System for operating the pressure suppression chamber head tank system.

The proposed Technical Specifications correct the position for these valves from "closed" to "open" since it is not possible for these valves to perform their intended function with the valve alignment currently specified. This also requires correcting the Technical Specifications relating to the action of these valves on an initiating signal. Since the valves are normally open the Technical Specifications have to be changed to indicate these valves "go closed" on an initiating signal instead of "stays closed" as currently specified. The proposed changes also correct typographical errors in the designation of the suppression chamber drain valves for Unit 1.

We have reviewed these proposed Technical Specification changes and determined they are needed to correct the existing Technical Specifications to be consistent with the normal operating position of these valves and therefore, these changes are acceptable.

### 3.0 Environmental Considerations

The amendments involve a change in the 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 is 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 Contributors: B. Siegel

Dated: August 2, 1984