

Docket Files

AUG 20 1976

*See SER*

Dockets Nos. 50-259  
and 50-260

Tennessee Valley Authority  
ATTN: Mr. Godwin Williams, Jr.  
Manager of Power  
818 Power Building  
Chattanooga, Tennessee 37201

Gentlemen:

Following the August 20, 1976 Licensing Board Initial Decision authorizing the issuance of the fire related portions of the enclosed Amendments (item a below), the Commission has issued these Amendments, Nos. 27 and 24 to Facility Licenses Nos. DPR-33 and DPR-52 for Browns Ferry Nuclear Plant, Units Nos. 1 and 2.

These amendments add license conditions relating to the completion of facility modifications for fire protection and include changes to the Technical Specifications that:

- (a) Reinstate the Technical Specifications for operation suspended pending completion of restoration work and modifications required as a result of the March 22, 1975 fire. This work and these modifications have been reviewed and accepted by NRC and have been completed by TVA;
- (b) Incorporate operating limits based on an acceptable evaluation model that conforms with the requirements of Section 50.46 of 10 CFR Part 50, and terminates restrictions imposed on the facility by the Commission's December 27, 1974 Order for Modification of License;
- (c) Permit the use of operating limits based on the General Electric Thermal Analysis Basis (GETAB);
- (d) Revise temperature limits for the suppression pool water;
- (e) Revise Charcoal Filter Testing Requirements;
- (f) Add Hydraulic Snubber Testing and Inspection requirements;
- (g) Add limiting conditions for operation associated with cracked collet housings of control rod drive mechanisms;

OFFICE >						
SURNAME >						
DATE >						

AUG 20 1976

Tennessee Valley Authority

- 2 -

- (h) Change control rod reactivity limitations;
- (i) Permits substitution of a thermosetting plastic coating and surveillance for torus corrosion protection in lieu of chromate in the torus water;
- (j) Change the method for personnel protection for High Radiation Areas;
- (k) Eliminate absolute calibration of Intermediate Range Monitors of neutron monitoring system; and
- (l) Incorporate the radiological environmental monitoring program, formerly in Appendix A, into Appendix B.

Copies of the Safety Evaluation, and the Federal Register Notice are also enclosed.

Sincerely,

A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors

Enclosures:

- 1. Amendment No. 27 to DPR-33
- 2. Amendment No. 24 to DPR-52
- 3. Safety Evaluation
- 4. Federal Register Notice

CC w/encl:  
See next page

SEE PREVIOUS YELLOW FOR CONCURRENCE AND DISTRIBUTION

OFFICE >	DOR:ORB# 1				DOR:ORB#1	DOR:ORB#1
SURNAME >	VWambach:				KRG	ASchwencer
DATE >	8/20/76				8/20/76	8/ /76

- (h) Change control rod reactivity limitations;
- (i) Permits substitution of a thermo-setting plastic coating and surveillance for torus corrosion protection in lieu of chromate in the torus water;
- (j) Change the method for personnel protection for High Radiation Areas; and
- (k) Eliminate absolute calibration of Intermediate Range Monitors of neutron monitoring system.

On August 20, 1976 the Licensing Board issued its Initial Decision authorizing the issuance of the fire related portions of the Amendments (item a).

Copies of the Safety Evaluation and the Federal Register Notice and Initial Decision are also enclosed.

Sincerely,

A. Schwencer, Chief  
 Operating Reactors Branch #1  
 Division of Operating Reactors

Enclosures:

1. Amendment No. 27 to DPR-33
2. Amendment No. 24 to DPR-52
3. Safety Evaluation
4. Federal Register Notice
5. Initial Decision

cc w/enclosures:  
 See next page

DISTRIBUTION

- Docket (2)
- NRC PDR (2)
- Local PDR
- ORB#1 Reading
- KRGoller/TJCarter
- SMSheppard
- TWambach
- RBaer
- DEisenhut
- OELD
- OI&E(5)
- BJones(8)
- BScharf(15)
- JMcGough
- ACRS(16)
- DRoss
- VStello
- TBAbernathy

- JRBuchanan
- JSaltzman
- AESteen
- WPasciak, EEB
- A. Rosenthal, ASLAB
- J. Yore, ASLBP
- R. H. Payne, EPA
- EPA Headquarters

SEE PREVIOUS YELLOW FOR CONCURRENCES

OFFICE → x27433	ORB#1 <i>Wambach</i>	RSB <i>SAN</i>	DOR#1 <i>DEisenhut</i>	OELD <i>Stello</i>	AD:DOR	ORB#1
SURNAME →	TWambach:tb	RBaer <i>SN</i>	DEisenhut	<i>Stello</i>	KRGoller	ASchwencer
DATE →	8/20/76	8/20/76	8/20/76	8/20/76	8/ /76	8/ /76

cc: H. S. Sanger  
General Counsel  
629 New Sprankle Building  
Knoxville, Tennessee 37919

Mr. William E. Garner  
Route 4, Box 354  
Scottsboro, Alabama 35768

Athens Public Library  
South and Forrest  
Athens, Alabama 35611.

Mr. Thomas Lee Hammons  
Chairman, Limestone County Board  
of Revenue  
Athens, Alabama 35611

Ira L. Myers, M.D.  
State Health Officer  
State Department of Public Health  
State Office Building  
Montgomery, Alabama 36104



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. 27  
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendments by Tennessee Valley Authority (the licensee) comply 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 applications, 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, Facility Operating License No. DPR-33 is amended as indicated below and the Technical Specifications are reinstated as indicated in the attachment to this license amendment.
  - A. Change paragraph "D" to "E".
  - B. Add new paragraph D to read as follows:

"D. This license is subject to the following additional conditions.

- (1) The licensee is required to complete the following five plant modifications in the facility, which are related to the Fire Recovery Program, by the end of the first refueling outage of any of Browns Ferry Nuclear Plant, Units 1, 2, or 3.
  - (a) Install automatic deluge systems for all areas of cable trays where Division 1 and Division 2 cabling could be involved in the same fire;
  - (b) Install automatic pre-action sprinkler systems in all areas of the plant required for safe shutdown;
  - (c) Install a manual dry pipe sprinkler system in the cable spreading rooms;
  - (d) Change installed manual carbon dioxide system in the cable spreading rooms to automatic actuation; and
  - (e) Change the fire protection features of the battery room complex to do one of the following: (1) provide a total fire rated barrier enclosure of the facility battery room complex that exceeds the fire load contained in the room, (2) reduce the fire load to be within the fire barrier capability of 1-1/2 hours, or (3) provide a remote manual actuated sprinkler system in each room and provide the 1-1/2 hours fire barrier separation.
- (2) The licensee is required to assure that all fire brigade members will have received within 18 months an accelerated refresher training program conforming to the requirements of Section 2.2 of Supplement No. 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire, Issued July 3, 1976."

C. Revise paragraph 2.C.(4) to read as follows:

"(4) 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."

D. Add paragraph 2.C.(7) to read as follows:

"(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."

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

FOR THE NUCLEAR REGULATORY COMMISSION



Karl R. Goller, Assistant Director  
for Operating Reactors  
Division of Operating Reactors

Attachment:  
Technical Specifications  
(Appendices A and B)

Date of Issuance: August 20, 1976



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. 24  
License No. DPR-55

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendments by Tennessee Valley Authority (the licensee) comply 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 applications, 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, Facility Operating License No. DPR-55 is amended as indicated below and the Technical Specifications are reinstated as indicated in the attachment to this license amendment.
  - A. Change paragraph "D" to "E".
  - B. Add new paragraph D to read as follows:



"D. This license is subject to the following additional conditions.

- (1) The licensee is required to complete the following five plant modifications in the facility, which are related to the Fire Recovery Program, by the end of the first refueling outage of any of Browns Ferry Nuclear Plant, Units 1, 2, or 3.
  - (a) Install automatic deluge systems for all areas of cable trays where Division 1 and Division 2 cabling could be involved in the same fire;
  - (b) Install automatic pre-action sprinkler systems in all areas of the plant required for safe shutdown;
  - (c) Install a manual dry pipe sprinkler system in the cable spreading rooms;
  - (d) Change installed manual carbon dioxide system in the cable spreading rooms to automatic actuation; and
  - (e) Change the fire protection features of the battery room complex to do one of the following: (1) provide a total fire rated barrier enclosure of the facility battery room complex that exceeds the fire load contained in the room, (2) reduce the fire load to be within the fire barrier capability of 1-1/2 hours, or (3) provide a remote manual actuated sprinkler system in each room and provide the 1-1/2 hours fire barrier separation.
- (2) The licensee is required to assure that all fire brigade members will have received within 18 months an accelerated refresher training program conforming to the requirements of Section 2.2 of Supplement No. 2 to the Safety Evaluation Supporting the Operation After the Restoration and Modification of the Browns Ferry Nuclear Plant, Units 1 and 2 Following the March 22, 1975 Fire, Issued July 3, 1976."

C. Revise paragraph 2.C.(5) to read as follows:

"(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."

D. Add paragraph 2.C.(7) to read as follows:

"(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."

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

FOR THE NUCLEAR REGULATORY COMMISSION

*Karl R. Goller*

Karl R. Goller, Assistant Director  
for Operating Reactors  
Division of Operating Reactors

Attachment:  
Technical Specifications  
(Appendices A and B)

Date of Issuance: August 20, 1976

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 27 TO FACILITY LICENSE NO. DPR-33

AMENDMENT NO. 24 TO FACILITY LICENSE NO. DPR-52

DOCKETS NOS. 50-259 AND 50-260

Appendices A and B are revised in their entirety by the attached  
Appendices A and B.