

# REGULATORY DOCKET FILE COPY

OFC 10 1980

Docket Nos. 50-259  
50-260

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

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Dear Mr. Parris:

The Commission has issued the enclosed Amendment Nos. *64* and *60* to Facility Operating License Nos. DPR-33 and DPR-52 for the Browns Ferry Nuclear Plant, Unit Nos. 1 and 2. These amendments are in response to your letter of September 17, 1980 (TVA BFNP TS 150).

The revised Technical Specifications allow operation of Browns Ferry Unit 2 with the standby coolant supply capability (supplied from Unit 1) inoperable for a period not to exceed ten days.

Copies of the Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

Original Signed by  
J. A. Ippolito

Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

1. Amendment No. *64* to DPR-33
2. Amendment No. *60* to DPR-52
3. Safety Evaluation
4. Notice

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DATE	11/12/80	11/07/80	11/12/80	11/14/80	12/5/80

December 10, 1980

cc:

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 64  
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 September 17, 1980, 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 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. 64, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 10, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 64

FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Revise Appendix A as follows:

1. Remove the following pages and replace with identically numbered pages:

151/152

153/154

163/164

2. The underlined pages are the pages being changed; marginal lines on these pages indicate the revised area. The overleaf pages are provided for convenience.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.5.C RHR Service Water and Emergency Equipment Cooling Water Systems (EECWS) (Continued)

2. During power operation, RHRSW pumps must be operable and assigned to service as indicated below for the specified time limits.

TIME LIMIT (DAYS)	MINIMUM SERVICE ASSIGNMENT	
	RHRSW	EECW**
Indefinite	7*	3*
30	7* or 6***	2* or 3***
7	6*	2*

\*At least one operable pump must be assigned to each header.

\*\*Only automatically starting pumps may be assigned to EECW header service.

\*\*\*Nine pumps must be operable. Either configuration is acceptable: 7 and 2 or 6 and 3.

3. During power operation both RHRSW pumps D1 and D2 normally or alternately assigned to the RHR heat exchanger header supplying the standby coolant supply connection must be operable except as specified in 3.5.C.4 and 3.5.C.5 below.

4.5.C RHR Service Water and Emergency Equipment Cooling Water Systems (EECWS) (Continued)

2. a. If no more than two RHRSW pumps are inoperable, increased surveillance is not required.

b. When three RHRSW pumps are inoperable, the remaining pumps, associated essential control valves, and associated diesel generators shall be operated weekly.

c. When four RHRSW pumps are inoperable, the remaining pumps, associated essential control valves, and associated diesel generators shall be operated daily.

3. Routine surveillance for these pumps is specified in 4.5.C.1.

3.5.C RHR Service Water and Emergency  
Equipment Cooling Water Systems  
(EECWS)

1. Prior to reactor startup from a cold condition, 9 RHRSW pumps must be operable, with 7 pumps (including pump D1 or D2) assigned to RHRSW service and 2 automatically starting pumps assigned to EECW service.

4.5.C RHR Service Water and Emergency  
Equipment Cooling Water Systems  
(EECWS)

1. a. Each of the RHRSW pumps normally assigned to automatic service on the EECW headers will be tested automatically each time the diesel generators are tested. Each of the RHRSW pumps and all associated essential control valves for the EECW headers and RHR heat exchanger headers shall be demonstrated to be operable once every three months.
- b. Annually each RHRSW pump shall be flow-rate tested. To be considered operable, each pump shall pump at least 4500 gpm through its normally assigned flow path.

## LIMITING CONDITIONS FOR OPERATION

## SURVEILLANCE REQUIREMENTS

## 3.5.C (Continued)

4. One of the D1 or D2 RHRSW pumps assigned to the RHR heat exchanger supplying the standby coolant supply connection may be inoperable for a period not to exceed 30 days provided the operable pump is aligned to supply the RHR heat exchanger header and the associated diesel generator and essential control valves are operable.
5. The standby coolant supply capability may be inoperable for a period not to exceed ten days.
6. If specifications 3.5.C.2 through 3.5.C.5 are not met, an orderly shutdown shall be initiated and the unit placed in the cold shutdown condition within 24 hours.
7. There shall be at least 2 RHRSW pumps, associated with the selected RHR pumps, aligned for RHR heat exchanger service for each reactor vessel containing irradiated fuel.

## 4.5.C (Continued)

4. When it is determined that one of the RHRSW pumps supplying standby coolant is inoperable at a time when operability is required, the operable RHRSW pump on the same header and its associated diesel generator and the RHR heat exchanger header and associated essential control valves shall be demonstrated to be operable immediately and every 15 days thereafter.



3.5.D Equipment Area Coolers

1. The equipment area cooler associated with each RHR pump and the equipment area cooler associated with each set of core spray pumps (A and C or B and D) must be operable at all times when the pump or pumps served by that specific cooler is considered to be operable.
2. When an equipment area cooler is not operable, the pump(s) served by that cooler must be considered inoperable for Technical Specification purposes.

E. High Pressure Coolant Injection System (HPCIS)

1. The HPCI system shall be operable:
  - (1) prior to startup from a Cold Condition; or
  - (2) whenever there is irradiated fuel in the reactor vessel and the reactor vessel pressure is greater than 122 psig, except as specified in specification 3.5.E.2.

4.5.D Equipment Area Coolers

1. Each equipment area cooler is operated in conjunction with the equipment served by that particular cooler; therefore, the equipment area coolers are tested at the same frequency as the pumps which they serve.

E. High Pressure Coolant Injection System (HPCIS)

1. HPCI Subsystem testing shall be performed as follows:
 

a. Simulated Automatic Actuation Test	Once/ operating cycle
b. Pump Operability	Once/ month
c. Motor Operated Valve Operability	Once/ month
d. Flow Rate at normal reactor vessel operating pressure	Once/3 months
e. Flow Rate at 150 psig	Once/ operating cycle

The HPCI pump shall deliver at least 5000 gpm during each flow rate test.

### Bases

The suppression chamber can be drained when the reactor vessel pressure is atmospheric, irradiated fuel is in the reactor vessel, and work is not in progress which has the potential to drain the vessel. By requiring the fuel pool gate to be open with the vessel head removed, the combined water inventory in the fuel pool, the reactor cavity, and the separator/dryer pool, between the fuel pool low level alarm and the reactor vessel flange, is about 65,800 cubic feet (492,000 gallons). This will provide adequate low-pressure cooling in lieu of CSS and RHR (LPCI and containment cooling mode) as currently required in specifications 3.5.A.4 and 3.5.B.9. The additional requirements for providing standby coolant supply available will ensure a redundant supply of coolant supply. Control rod drive maintenance may continue during this period provided no more than one drive is removed at a time unless blind flanges are installed during the period of time CRD's are not in place.

### 3.5 BASES

Should the capability for providing flow through the cross-connect lines be lost, a ten day repair time is allowed before shutdown is required. This repair time is justified based on the very small probability for ever needing RHR pumps and heat exchangers to supply an adjacent unit.

#### REFERENCES

1. Residual Heat Removal System (BFNP FSAR subsection 4.8)
2. Core Standby Cooling Systems (BFNP FSAR Section 6)

#### 3.5.C RHR Service Water System and Emergency Equipment Cooling Water System (EECWS)

There are two EECW headers (north and south) with four automatic starting RHRSW pumps on each header. All components requiring emergency cooling water are fed from both headers thus assuring continuity of operation if either header is operable. Each header alone can handle the flows to all components. Two RHRSW pumps can supply the full flow requirements of all essential EECW loads for any abnormal or postaccident situation.

There are four RHR heat exchanger headers (A, B, C, & D) with one RHR heat exchanger from each unit on each header. There are two RHRSW pumps on each header; one normally assigned to each header (A2, B2, C2, or D2) and one on alternate assignment (A1, B1, C1, or D1). One RHR heat exchanger header can adequately deliver the flow supplied by both RHRSW pumps to any two of the three RHRSW heat exchangers on the header. One RHRSW pump can supply the full flow requirement of one RHR heat exchanger. Two RHR heat exchangers can more than adequately handle the cooling requirements of one unit in any abnormal or postaccident situation.

The RHR Service Water Systems was designed as a shared system for three units. The specification, as written, is conservative when consideration is given to particular pumps being out of service and to possible valving arrangements. If unusual operating conditions arise such that more pumps are out of service than allowed by this specification, a special case request may be made to the NRC to allow continued operation if the actual system cooling requirements can be assured.

Should one of the two RHRSW pumps normally or alternately assigned to the RHR heat exchanger header supplying the standby coolant supply connection become inoperable, an equal capability for long-term fluid makeup to the unit reactor and for cooling of the unit containment remains operable. Because of the availability of an equal makeup and cooling capability which is demonstrated to be operable immediately and with specified subsequent surveillance, a 30-day repair period is justified. Should the capability to provide standby coolant supply be lost, a 10-day repair time is justified based on the low probability for ever needing the standby coolant supply.



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 60  
License No. DPR-52

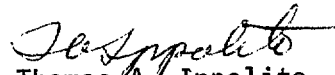
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated September 17, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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 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. 60, 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 10, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 60

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Review Appendix A as follows:

1. Remove the following pages and replace with identically numbered pages:

151/152

153/154

163/164

2. The underlined pages are the pages being changed; marginal lines on these pages indicate the area being revised. The overleaf pages are provided for convenience.

3.5.C RHR Service Water and Emergency  
Equipment Cooling Water Systems  
(EECWS)

1. Prior to reactor startup from a cold condition, 9 RHRSW pumps must be operable; with 7 pumps (including one of pumps D1, D2, B2, or B1) assigned to RHRSW service and 2 automatically starting pumps assigned to EECW service.

4.5.C RHR Service Water and Emergency  
Equipment Cooling Water Systems  
(EECWS)

1. a. Each of the RHRSW pumps normally assigned to automatic service on the EECW headers will be tested automatically each time the diesel generators are tested. Each of the RHRSW pumps and all associated essential control valves for the EECW headers and RHR heat exchanger headers shall be demonstrated to be operable once every three months.
- b. Annually each RHRSW pump shall be flow-rate tested. To be considered operable, each pump shall pump at least 4500 gpm through its normally assigned flow path.

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.5.C RHR Service Water and Emergency Equipment Cooling Water Systems (EECWS) (Continued)

2. During power operation, RHRSW pumps must be operable and assigned to service as indicated below for the specified time limits.

TIME LIMIT (DAYS)	MINIMUM SERVICE ASSIGNMENT	
	RHRSW	EECW**
Indefinite	7*	3*
30	7* or 6***	2* or 3***
7	6*	2*

\*At least one operable pump must be assigned to each header.

\*\*Only automatically starting pumps may be assigned to EECW header service.

\*\*\*Nine pumps must be operable. Either configuration is acceptable: 7 and 2 or 6 and 3.

3. During unit 2 power operation any two RHRSW pumps (D1, D2, E1, and E2) normally or alternately assigned to the RHR heat exchanger header supplying the standby coolant supply connection must be operable except as specified in 3.5.C.4 and 3.5.C.5 below.

4.5.C RHR Service Water and Emergency Equipment Cooling Water Systems (EECWS) (Continued)

2.
  - a. If no more than two RHRSW pumps are inoperable, increased surveillance is not required.
  - b. When three RHRSW pumps are inoperable, the remaining pumps, associated essential control valves, and associated diesel generators shall be operated weekly.
  - c. When four RHRSW pumps are inoperable, the remaining pumps, associated essential control valves, and associated diesel generators shall be operated daily.
  
3. Routine surveillance for these pumps is specified in 4.5.C.1.



## LIMITING CONDITIONS FOR OPERATION

## SURVEILLANCE REQUIREMENTS

## 3.5.C (Continued)

4. Three of the D1, D2, B1, B2 RHRSW pumps assigned to the RHR heat exchanger supplying the standby coolant supply connection may be inoperable for a period not to exceed 30 days provided the operable pump is aligned to supply the RHR heat exchanger header and the associated diesel generator and essential control valves are operable.
5. The standby coolant supply capability may be inoperable for a period not to exceed ten days.
6. If specifications 3.5.C.2 through 3.5.C.5 are not met, an orderly shutdown shall be initiated and the unit placed in the cold shutdown condition within 24 hours.
7. There shall be at least 2 RHRSW pumps, associated with the selected RHR pumps, aligned for RHR heat exchanger service for each reactor vessel containing irradiated fuel.

## 4.5.C (Continued)

4. When it is determined that one of the RHRSW pumps supplying standby coolant is inoperable at a time when operability is required, the operable RHRSW pump on the same header and its associated diesel generator and the RHR heat exchanger header and associated essential control valves shall be demonstrated to be operable immediately and every 15 days thereafter.

3.5.D Equipment Area Coolers

1. The equipment area cooler associated with each RHR pump and the equipment area cooler associated with each set of core spray pumps (A and C or B and D) must be operable at all times when the pump or pumps served by that specific cooler is considered to be operable.
2. When an equipment area cooler is not operable, the pump(s) served by that cooler must be considered inoperable for Technical Specification purposes.

E. High Pressure Coolant Injection System (HPCIS)

1. The HPCI system shall be operable:
  - (1) prior to startup from a Cold Condition; or
  - (2) whenever there is irradiated fuel in the reactor vessel and the reactor vessel pressure is greater than 122 psig, except as specified in specification 3.5.E.2.

4.5.D Equipment Area Coolers

1. Each equipment area cooler is operated in conjunction with the equipment served by that particular cooler; therefore, the equipment area coolers are tested at the same frequency as the pumps which they serve.

E. High Pressure Coolant Injection System (HPCIS)

1. HPCI Subsystem testing shall be performed as follows:
 

a. Simulated Automatic Actuation Test	Once/ operating cycle
b. Pump Operability	Once/ month
c. Motor Operated Valve Operability	Once/ month
d. Flow Rate at normal reactor vessel operating pressure	Once/3 months
e. Flow Rate at 150 psig	Once/ operating cycle

The HPCI pump shall deliver at least 5000 gpm during each flow rate test.

## Bases

The suppression chamber can be drained when the reactor vessel pressure is atmospheric, irradiated fuel is in the reactor vessel, and work is not in progress which has the potential to drain the vessel. By requiring the fuel pool gate to be open with the vessel head removed, the combined water inventory in the fuel pool, the reactor cavity, and the separator/dryer pool, between the fuel pool low level alarm and the reactor vessel flange, is about 65,800 cubic feet (492,000 gallons). This will provide adequate low-pressure cooling in lieu of CSS and RHR (LPCI and containment cooling mode) as currently required in specifications 3.5.A.4 and 3.5.B.9. The additional requirements for providing standby coolant supply available will ensure a redundant supply of coolant supply. Control rod drive maintenance may continue during this period provided no more than one drive is removed at a time unless blind flanges are installed during the period of time CRD's are not in place.

### 3.5 BASES

Should the capability for providing flow through the cross-connect lines be lost, a ten day repair time is allowed before shutdown is required. This repair time is justified based on the very small probability for ever needing RHR pumps and heat exchangers to supply an adjacent unit.

#### REFERENCES

1. Residual Heat Removal System (BFNP FSAR subsection 4.8)
  2. Core Standby Cooling Systems (BFNP FSAR Section 6)
- 3.5.C RHR Service Water System and Emergency Equipment Cooling Water System (EECW)

There are two EECW headers (north and south) with four automatic starting RHRSW pumps on each header. All components requiring emergency cooling water are fed from both headers thus assuring continuity of operation if either header is operable. Each header alone can handle the flows to all components. Two RHRSW pumps can supply the full flow requirements of all essential EECW loads for any abnormal or postaccident situation.

There are four RHR heat exchanger headers (A, B, C, & D) with one RHR heat exchanger from each unit on each header. There are two RHRSW pumps on each header; one normally assigned to each header (A2, B2, C2, or D2) and one on alternate assignment (A1, B1, C1, or D1). One RHR heat exchanger header can adequately deliver the flow supplied by both RHRSW pumps to any two of the three RHRSW heat exchangers on the header. One RHRSW pump can supply the full flow requirement of one RHR heat exchanger. Two RHR heat exchangers can more than adequately handle the cooling requirements of one unit in any abnormal or postaccident situation.

The RHR Service Water Systems was designed as a shared system for three units. The specification, as written, is conservative when consideration is given to particular pumps being out of service and to possible valving arrangements. If unusual operating conditions arise such that more pumps are out of service than allowed by this specification, a special case request may be made to the NRC to allow continued operation if the actual system cooling requirements can be assured.

Should one of the two RHRSW pumps normally or alternately assigned to the RHR heat exchanger header supplying the standby coolant supply connection become inoperable, an equal capability for long-term fluid makeup to the unit reactor and for cooling of the unit containment remains operable. Because of the availability of an equal makeup and cooling capability which is demonstrated to be operable immediately and with specified subsequent surveillance, a 30-day repair period is justified. Unit 2 may be supplied standby coolant from either of four pumps--B1, B2, D1, or D2. Should the capability to provide standby coolant supply be lost, a 10-day repair time is justified based on the low probability for ever needing the standby coolant supply.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 64 TO FACILITY OPERATING LICENSE NO. DPR-33  
AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. DPR-52  
TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-259 AND 50-260

1.0 Introduction

By letter dated September 17, 1980 (TVA BFNP TS 150) the Tennessee Valley Authority (the licensee or TVA) requested changes to the Technical Specifications (Appendix A) appended to Facility Operating License Nos. DPR-33 and DPR-52 for the Browns Ferry Nuclear Plant, Unit Nos. 1 and 2.

The proposed amendments and revised Technical Specifications would allow operation of Browns Ferry Unit 2 with the standby coolant supply capability (supplied from Unit 1) inoperable for a period not to exceed ten days.

2.0 Discussion

In response to TVA's application of August 26, 1980, on September 9, 1980 we issued Amendment No. 34 to Facility Operating License No. DPR-68 for the Browns Ferry Nuclear Plant Unit No. 3. The Amendment allowed operation of Unit 3 with the residual heat removal service water (RHRSW) standby coolant supply capability (supplied from Unit 2) inoperable for a period not to exceed 10 days. TVA's application of September 17, 1980 - which is the subject of this safety evaluation - requested the same change for Unit 2.

3.0 Evaluation

Our safety evaluation for Amendment No. 34 for Unit 3 included a detailed discussion of the configuration of the residual heat removal (RHR) system and the RHRSW system for all three Browns Ferry units. The discussion and evaluation in Amendment No. 34 for Unit 3 are completely pertinent to this safety evaluation and the safety evaluation for Amendment No. 34 for Unit 3 is incorporated herein by reference.

As noted in the previous safety evaluation, the RHR pump suction and heat exchanger discharge lines of one loop in Unit 1 are cross-connected to the pump suction and heat exchanger discharge lines of one RHR loop in Unit 2. Units 2 and 3 systems are cross-connected in a similar manner. This arrangement is shown in the attached figure for Units 1 and 2. The cross-connection valves are those in the lined or cross-hatched circles. The cross-hatched valve permits RHRSW (river water) from the IDRHR heat exchanger to be added to the RHR system (primary coolant) as a last-ditch emergency if all the "clean" water sources of cooling water in Units 1 and 2 have been lost (condensate, suppression pool, etc.) and the normal service water makeup in the unit in trouble is not available. The present Technical Specifications do not provide any period of time for the RHRSW cross-connection to be out of service, which in turn does not allow the associated RHR heat exchangers and RHRSW pumps to be out of service for maintenance - even though there is considerable redundancy in the RHR systems and the present Technical Specifications permit the RHR cross-flow connections to be out-of-service for up to 10 days. We conclude, as we did in Amendment No. 34, that the proposed Technical Specification change to allow a 10 day outage time for the RHRSW cross-flow connection between units is acceptable and that the overall reduction in plant safety margin is insignificant.

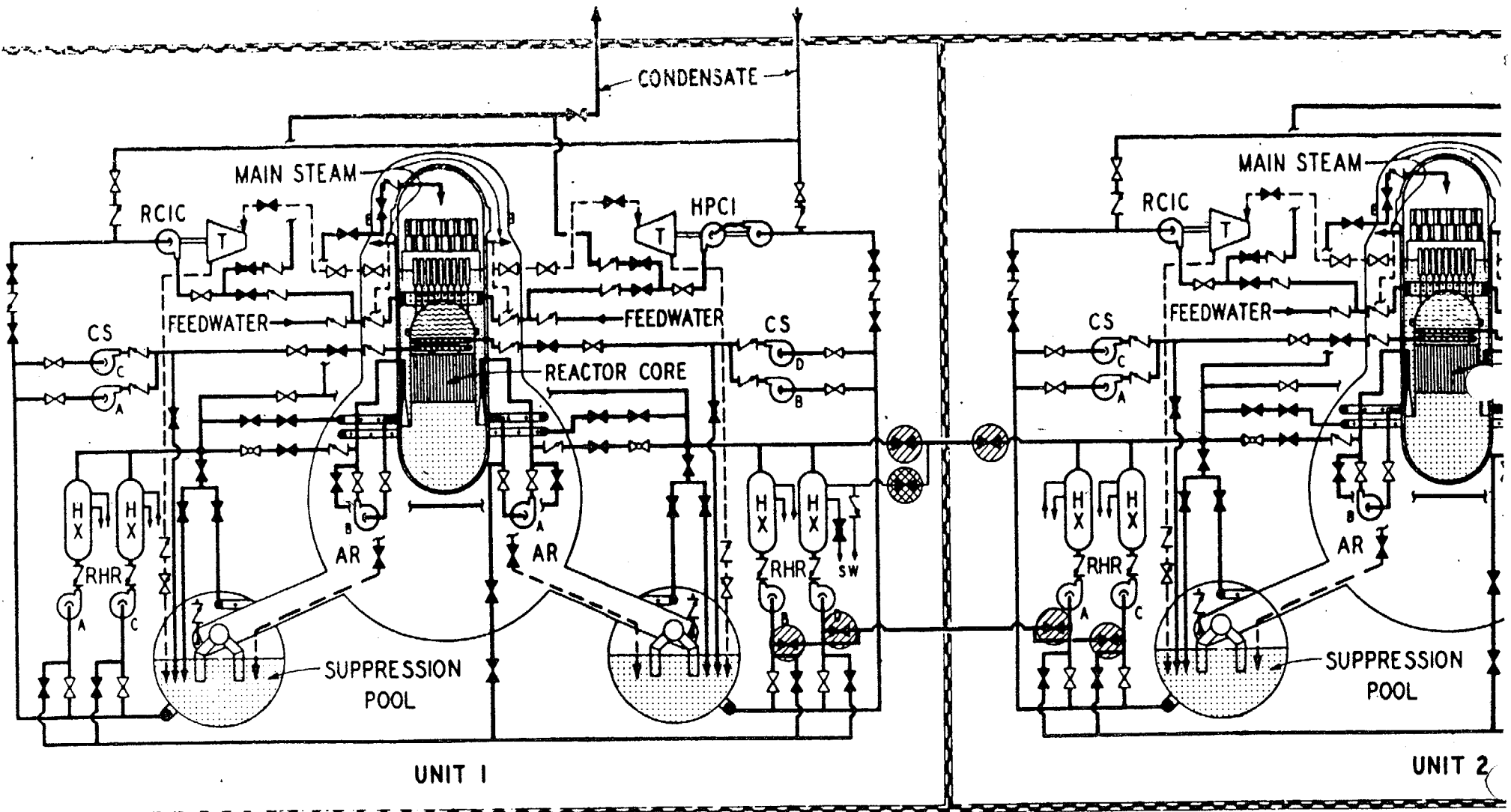
#### 4.0 Environmental Considerations



We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR 51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendments.

#### 5.0 Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Dated: December 10, 1980



-  UNIT CROSS CONNECTIONS
-  STANDBY COOLANT SUPPLY

**BROWNS FERRY NUCLEAR PLANT**

**Residual Heat Removal System, Unit  
Cross Connections and Standby Coolant Supply**

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-259 AND 50-260TENNESSEE VALLEY AUTHORITYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY  
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 64 to Facility Operating License No. DPR-33 and Amendment No. 60 to Facility Operating License No. DPR-52 issued to Tennessee Valley Authority (the licensee), which revised Technical Specifications for operation of the Browns Ferry Nuclear Plant, Unit Nos. 1 and 2, located in Limestone County, Alabama. The amendments are effective as of the date of issuance.

These amendments change the Technical Specifications to allow operation of Browns Ferry Unit No. 2 with the standby coolant supply capability (supplied from Unit No. 1) inoperable for a period not to exceed ten days.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.


The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.



For further details with respect to this action, see (1) the application for amendments dated September 17, 1980, (2) Amendment No. 64 to License No. DPR-33 and Amendment No. 60 to License No. DPR-52, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW, Washington, D. C. and at the Athens Public Library, South and Forrest, Athens, Alabama 35611. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland this 10th day of December, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing