UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 204
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 December 23, 1992, and supplemented August 12, 1993 and January 21, 1994, 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. 204, 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 its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 19, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 204

FACILITY OPERATING LICENSE NO. DPR-33

DOCKET NO. 50-259

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf* pages are provided to maintain document completeness.

REMOVE	INSERT
3.5/4.5-3	3.5/4.5-3*
3.5/4.5-4	3.5/4.5-4
3.5/4.5-7	3.5/4.5-7
3.5/4.5-8	3.5/4.5-8*

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.A Core Spray System (CSS)	
* 5. When irradiated fuel is in the reactor vessel and the reactor vessel head is removed, core spray is not required to be OPERABLE provided the cavity is flooded, the fuel pool gates are open and the fuel pool water level is maintained above the low level alarm point, and provided one RHRSW pump and associated valves supplying the standby coolant supply are OPERABLE.	
* When work is in progress which has the potential to drain the vessel, manual initiation capability of either 1 CSS Loop or 1 RHR pump, with the capability of injecting water into the reactor vessel, and the associated diesel generator(s) are required.	

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B. Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
1. The RHRS shall be OPERABLE #:	
(1) PRIOR TO STARTUP from a COLD CONDITION; or	
(2) when there is irradiated fuel in the reactor vessel and when the reactor vessel pressure is greater than atmospheric, except as specified in Specifications 3.5.B.2, through 3.5.B.7.	
	1. a. Simulated Automatic Actuation Test — Once/Operating Cycle
	b. Pump OPERABILITY — Per Specification 1.0.MM
	c. Motor Operated valve OPERABILITY — Per Specification 1.0.MM
	d. Pump Flow Rate — Once/3 months
	e. Test Check Valve — Per Specification 1.0.MM
	f. Verify that each valve (manual, power-operated, or automatic) in the injection flow-path that is not locked, sealed, or otherwise secured in position, is in its correct* position. — Once/Month
	g. Verify LPCI subsystem cross-tie valve is closed and power removed from valve operator. — Once/Month

Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling with reactor steam dome pressure less than 105 psig in HOT SHUTDOWN, if capable of being manually realigned and not otherwise inoperable.

* Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in a position for another mode of operation.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
8. If Specifications 3.5.B.1 through 3.5.B.7 are not met, an orderly shutdown shall be initiated and the reactor shall be placed in the COLD SHUTDOWN CONDITION within 24 hours.	8. No additional surveillance required.
9. When the reactor vessel pressure is atmospheric and irradiated fuel is in the reactor vessel, at least one RHR loop with two pumps or two loops with one pump per loop shall be OPERABLE. The pumps' associated diesel generators must also be OPERABLE. Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling, if capable of being manually realigned and not otherwise inoperable.	9. When the reactor vessel pressure is atmospheric, the RHR pumps and valves that are required to be OPERABLE shall be demonstrated to be OPERABLE per Specification 1.0.MM.
10. If the conditions of Specification 3.5.A.5 are met, LPCI and containment cooling are not required.	10. No additional surveillance required.
11. When there is irradiated fuel in the reactor and the reactor is not in the COLD SHUTDOWN CONDITION, 2 RHR pumps and associated heat exchangers and valves on an adjacent unit must be OPERABLE and capable of supplying cross-connect capability except as specified in Specification 3.5.B.12 below. (Note: Because cross-connect capability is not a short-term requirement, a component is not considered inoperable if cross-connect capability can be restored to service within 5 hours.)	11. The RHR pumps on the adjacent units which supply cross-connect capability shall be demonstrated to be OPERABLE per Specification 1.0.MM when the cross-connect capability is required.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
12. If one RHR pump or associated heat exchanger located on the unit cross-connection in the adjacent unit is inoperable for any reason (including valve inoperability, pipe break, etc.), the reactor may remain in operation for a period not to exceed 30 days provided the remaining RHR pump and associated diesel generator are OPERABLE.	12. No additional surveillance required.
13. If RHR cross-connection flow or heat removal capability is lost, the unit may remain in operation for a period not to exceed 10 days unless such capability is restored.	13. No additional surveillance required.
14. All recirculation pump discharge valves shall be OPERABLE PRIOR TO STARTUP (or closed if permitted elsewhere in these specifications).	14. All recirculation pump discharge valves shall be tested for OPERABILITY during any period of COLD SHUTDOWN CONDITION exceeding 48 hours, if OPERABILITY tests have not been performed during the preceding 31 days.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 223
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 December 23, 1992, and supplemented August 12, 1993 and January 21, 1994, 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. 223 , 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 its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 19, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 223

FACILITY OPERATING LICENSE NO. DPR-52

DOCKET NO. 50-260

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf* pages are provided to maintain document completeness.

REMOVE	INSERT
3.5/4.5-3	3.5/4.5-3*
3.5/4.5-4	3.5/4.5-4
3.5/4.5-7	3.5/4.5-7
3.5/4.5-8	3.5/4.5-8*

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.A Core Spray System (CSS)	
* 5. When irradiated fuel is in the reactor vessel and the reactor vessel head is removed, core spray is not required to be OPERABLE provided the cavity is flooded, the fuel pool gates are open and the fuel pool water level is maintained above the low level alarm point, and provided one RHRSW pump and associated valves supplying the standby coolant supply are OPERABLE.	
* When work is in progress which has the potential to drain the vessel, manual initiation capability of either 1 CSS Loop or 1 RHR pump, with the capability of injecting water into the reactor vessel, and the associated diesel generator(s) are required.	

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
1. The RHRS shall be OPERABLE #:	1. a. Simulated Automatic Actuation Test — Once/Operating Cycle
(1) PRIOR TO STARTUP from a COLD CONDITION; or	b. Pump OPERABILITY — Per Specification 1.0.MM
(2) when there is irradiated fuel in the reactor vessel and when the reactor vessel pressure is greater than atmospheric, except as specified in Specifications 3.5.B.2, through 3.5.B.7.	c. Motor Operated valve OPERABILITY — Per Specification 1.0.MM
	d. Pump Flow Rate — Once/3 months
	e. Testable Check Valve — Per Specification 1.0.MM
	f. Verify that each valve (manual, power-operated, or automatic) in the injection flow-path that is not locked, sealed, or otherwise secured in position, is in its correct* position. — Once/Month
	g. Verify LPCI subsystem cross-tie valve is closed and power removed from valve operator. — Once/Month

Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling with reactor steam dome pressure less than 105 psig in HOT SHUTDOWN, if capable of being manually realigned and not otherwise inoperable.

* Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in a position for another mode of operation.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
8. If Specifications 3.5.B.1 through 3.5.B.7 are not met, an orderly shutdown shall be initiated and the reactor shall be placed in the COLD SHUTDOWN CONDITION within 24 hours.	8. No additional surveillance required.
9. When the reactor vessel pressure is atmospheric and irradiated fuel is in the reactor vessel, at least one RHR loop with two pumps or two loops with one pump per loop shall be OPERABLE. The pumps' associated diesel generators must also be OPERABLE. Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling, if capable of being manually realigned and not otherwise inoperable.	9. When the reactor vessel pressure is atmospheric, the RHR pumps and valves that are required to be OPERABLE shall be demonstrated to be OPERABLE per Specification 1.0.MM.
10. If the conditions of Specification 3.5.A.5 are met, LPCI and containment cooling are not required.	10. No additional surveillance required.
11. When there is irradiated fuel in the reactor and the reactor is not in the COLD SHUTDOWN CONDITION, 2 RHR pumps and associated heat exchangers and valves on an adjacent unit must be OPERABLE and capable of supplying cross-connect capability except as specified in Specification 3.5.B.12 below. (Note: Because cross-connect capability is not a short-term requirement, a component is not considered inoperable if cross-connect capability can be restored to service within 5 hours.)	11. The RHR pumps on the adjacent units which supply cross-connect capability shall be demonstrated to be OPERABLE per Specification 1.0.MM when the cross-connect capability is required.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
12. If three RHR pumps or associated heat exchangers located on the unit cross-connection in the adjacent units are inoperable for any reason (including valve inoperability, pipe break, etc.), the reactor may remain in operation for a period not to exceed 30 days provided the remaining RHR pump and associated diesel generator are OPERABLE.	12. No additional surveillance required.
13. If RHR cross-connection flow or heat removal capability is lost, the unit may remain in operation for a period not to exceed 10 days unless such capability is restored.	13. No additional surveillance required.
14. All recirculation pump discharge valves shall be OPERABLE PRIOR TO STARTUP (or closed if permitted elsewhere in these specifications).	14. All recirculation pump discharge valves shall be tested for OPERABILITY during any period of COLD SHUTDOWN CONDITION exceeding 48 hours, if OPERABILITY tests have not been performed during the preceding 31 days.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 177
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 December 23, 1992, and supplemented August 12, 1993, 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. 177, 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 its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 19, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 177

FACILITY OPERATING LICENSE NO. DPR-68

DOCKET NO. 50-296

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf* pages are provided to maintain document completeness.

REMOVE	INSERT
3.5/4.5-3	3.5/4.5-3*
3.5/4.5-4	3.5/4.5-4
3.5/4.5-7	3.5/4.5-7
3.5/4.5-8	3.5/4.5-8*

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.A Core Spray System (CSS)	
* 5. When irradiated fuel is in the reactor vessel and the reactor vessel head is removed, core spray is not required to be OPERABLE provided the cavity is flooded, the fuel pool gates are open and the fuel pool water level is maintained above the low level alarm point, and provided one RHRSW pump and associated valves supplying the standby coolant supply are OPERABLE.	
* When work is in progress which has the potential to drain the vessel, manual initiation capability of either 1 CSS Loop or 1 RHR pump, with the capability of injecting water into the reactor vessel, and the associated diesel generator(s) are required.	

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)

1. The RHRS shall be OPERABLE #:

   (1) PRIOR TO STARTUP from a COLD CONDITION; or

   (2) when there is irradiated fuel in the reactor vessel and when the reactor vessel pressure is greater than atmospheric, except as specified in Specifications 3.5.B.2, through 3.5.B.7.

4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)

1. a.	Simulated Automatic Actuation Test	Once/ Operating Cycle
b.	Pump OPERABILITY	Per Specification 1.0.MM
c.	Motor Operated valve OPERABILITY	Per Specification 1.0.MM
d.	Pump Flow Rate	Once/3 months
e.	Testable Check Valve	Per Specification 1.0.MM
f.	Verify that each valve (manual, power-operated, or automatic) in the injection flow-path that is not locked, sealed, or otherwise secured in position, is in its correct* position.	Once/Month
g.	Verify LPCI subsystem cross-tie valve is closed and power removed from valve operator.	Once/Month

Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling with reactor steam dome pressure less than 105 psig in HOT SHUTDOWN, if capable of being manually realigned and not otherwise inoperable.

* Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in a position for another mode of operation.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
8. If Specifications 3.5.B.1 through 3.5.B.7 are not met, an orderly shutdown shall be initiated and the reactor shall be placed in the COLD SHUTDOWN CONDITION within 24 hours.	8. No additional surveillance required.
9. When the reactor vessel pressure is atmospheric and irradiated fuel is in the reactor vessel, at least one RHR loop with two pumps or two loops with one pump per loop shall be OPERABLE. The pumps' associated diesel generators must also be OPERABLE. Low pressure coolant injection (LPCI) may be considered OPERABLE during alignment and operation for shutdown cooling, if capable of being manually realigned and not otherwise inoperable.	9. When the reactor vessel pressure is atmospheric, the RHR pumps and valves that are required to be OPERABLE shall be demonstrated to be OPERABLE per Specification 1.0.MM.
10. If the conditions of Specification 3.5.A.5 are met, LPCI and containment cooling are not required.	10. No additional surveillance required.
11. When there is irradiated fuel in the reactor and the reactor is not in the COLD SHUTDOWN CONDITION, 2 RHR pumps and associated heat exchangers and valves on an adjacent unit must be OPERABLE and capable of supplying cross-connect capability except as specified in Specification 3.5.B.12 below. (Note: Because cross-connect capability is not a short-term requirement, a component is not considered inoperable if cross-connect capability can be restored to service within 5 hours.)	11. The B and D RHR pumps on unit 2 which supply cross-connect capability shall be demonstrated to be OPERABLE per Specification 1.0.MM when the cross-connect capability is required.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)	4.5.B Residual Heat Removal System (RHRS) (LPCI and Containment Cooling)
12. If one RHR pump or associated heat exchanger located on the unit cross-connection in unit 2 is inoperable for any reason (including valve inoperability, pipe break, etc.), the reactor may remain in operation for a period not to exceed 30 days provided the remaining RHR pump and associated diesel generator are OPERABLE.	12. No additional surveillance required.
13. If RHR cross-connection flow or heat removal capability is lost, the unit may remain in operation for a period not to exceed 10 days unless such capability is restored.	13. No additional surveillance required.
14. All recirculation pump discharge valves shall be OPERABLE PRIOR TO STARTUP (or closed if permitted elsewhere in these specifications).	14. All recirculation pump discharge valves shall be tested for OPERABILITY during any period of COLD SHUTDOWN CONDITION exceeding 48 hours, if OPERABILITY tests have not been performed during the preceding 31 days.