



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

TENNESSEE VALLEY AUTHORITY  
DOCKET NO. 50-250  
BROWNS FERRY NUCLEAR PLANT, UNIT 2  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 180  
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 May 24, 1990 as supplemented September 17, 1990, 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.

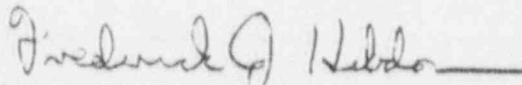
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-52 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 180, 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. Heddon, Director  
Project Directorate II-4, NRR  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 10, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 180

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

3.2/4.2-16

3.2/4.2-17

3.2/4.2-40

3.2/4.2-41

3.2/4.2-44

3.2/4.2-45

3.2/4.2-61

3.2/4.2-61a

INSERT

3.2/4.2-16

3.2/4.2-17\*

3.2/4.2-40

3.2/4.2-41\*

3.2/4.2-44\*

3.2/4.2-45

3.2/4.2-61

3.2/4.2-61a

TABLE 3.2.B (Continued)

Unit	Minimum No. Operable Per Trip Sys(1)	Function	Trip Level Setting	Action	Remarks
BPN Unit 2  3.2/4.2-16  Amendment 180	2	Instrument Channel - Reactor Low Pressure (PIS-3-74 A & B) (PIS-68-95, 96)	450 psig $\pm$ 15	A	1. Below trip setting permissive for opening CSS and LPCI admission valves.
	2	Instrument Channel - Reactor Low Pressure (PS-3-74 A & B) (PS-68-95, 96)	230 psig $\pm$ 15	A	1. Recirculation discharge valve actuation.
	2	Core Spray Auto Sequencing Timers (5)	$6 \leq t \leq 8$ sec.	B	1. With diesel power 2. One per motor
	2	LPCI Auto Sequencing Timers (5)	$0 \leq t \leq 1$ sec.	B	1. With diesel power 2. One per motor
	1	RHRSW A1, B3, C1, and D3 Timers	$13 \leq t \leq 15$ sec.	A	1. With diesel power 2. One per pump
	2	Core Spray and LPCI Auto Sequencing Timers (6)	$0 \leq t \leq 1$ sec. $6 \leq t \leq 8$ sec. $12 \leq t \leq 16$ sec. $18 \leq t \leq 24$ sec.	B	1. With normal power 2. One per CSS motor 3. Two per RHR motor
	1	RHRSW A1, B3, C1, and D3 Timers	$27 \leq t \leq 29$ sec.	A	1. With normal power 2. One per pump

TABLE 3.2.B (Continued)

Minimum No.  
Operable Per  
Trip Sys(1)

	Function	Trip Level Setting	Action	Remarks
1(16)	ADS Timer	105 sec $\pm$ 7	A	1. Above trip setting in conjunction with low reactor water level permissive, low reactor water level, high drywell pressure or high drywell pressure bypass timer timed out, and RHR or CSS pumps running, initiates ADS.
1(16)	ADS Timer (12 1/2 min.) (High Drywell Pressure Bypass Timer)	12 1/2 min. $\pm$ 2	A	1. Above trip setting, in conjunction with low reactor water level permissive, low reactor water level, 105 sec. delay timer, and RHR or CSS pumps running, initiates ADS.
2	Instrument Channel - RHR Discharge Pressure	100 $\pm$ 10 psig	A	1. Below trip setting defers ADS actuation.
2	Instrument Channel CSS Pump Discharge Pressure	185 $\pm$ 10 psig	A	1. Below trip setting defers ADS actuation.
1(3)	Core Spray Sparger to Reactor Pressure Vessel d/p	2 psid $\pm$ 0.4	A	1. Alarm to detect core sparger pipe break.
	RHR (LPCI) Trip System bus power monitor	N/A	C	1. Monitors availability of power to logic systems.
1	Core Spray Trip System bus power monitor	N/A	C	1. Monitors availability of power to logic systems.
1	ADS Trip System bus power monitor	N/A	C	1. Monitors availability of power to logic systems and valves.

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BFN  
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3.2/4.2-40

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TABLE 4.2.A  
SURVEILLANCE REQUIREMENTS FOR PRIMARY CONTAINMENT AND REACTOR BUILDING ISOLATION INSTRUMENTATION

<u>Function</u>	<u>Functional Test</u>	<u>Calibration Frequency</u>	<u>Instrument Check</u>
Instrument Channel - Reactor Low Water Level (LIS-3-203A-D)	(1) (27)	Once/18 Months (28)	Once/day
Instrument Channel - Reactor High Pressure (PS-68-93 & 94)	(31)	Once/18 months	None
Instrument Channel - Reactor Low Water Level (LIS-3-56A-D)	(1) (27)	Once/18 months (28)	Once/day
Instrument Channel - High Drywell Pressure (PIS-64-56A-D)	(1) (27)	Once/18 Months (28)	N/A
Instrument Channel - High Radiation Main Steam Line Tunnel	29	(5)	Once/day
Instrument Channel - Low Pressure Main Steam Line (PIS-1-72, 76, 82, 86)	(29) (27)	Once/18 Months (28)	None
Instrument Channel - High Flow Main Steam Line (PdIS-1-13A-D, 25A-D, 36A-D, 50A-D)	(29) (27)	Once/18 Months (28)	Once/day

TABLE 4.2.A (Cont'd)  
SURVEILLANCE REQUIREMENTS FOR PRIMARY CONTAINMENT AND REACTOR BUILDING ISOLATION INSTRUMENTATION

BFN  
Unit 2

Function	Functional Test	Calibration Frequency	Instrument Check
Instrument Channel - Main Steam Line Tunnel High Temperature	Once/3 months (27)	Once/operating cycle	None
Instrument Channel - Reactor Building Ventilation High Radiation - Reactor Zone	(1) (22)	Once/3 months	Once/day (8)
Instrument Channel - Reactor Building Ventilation High Radiation - Refueling Zone	(1) (22)	Once/3 Months	Once/day (8)
Instrument Channel - SGTS Train A Heaters	(4)	(9)	N/A
Instrument Channel - SGTS Train B Heaters	(4)	(9)	N/A
Instrument Channel - SGTS Train C Heaters	(4)	(9)	N/A
Reactor Building Isolation Timer (refueling floor)	(4)	Once/operating cycle	N/A
Reactor Building Isolation Timer (reactor zone)	(4)	Once/operating cycle	N/A

3.2/4.2-61

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TABLE 4.2.B  
SURVEILLANCE REQUIREMENTS FOR INSTRUMENTATION THAT INITIATE OR CONTROL THE CSCS

Function	Functional Test	Calibration	Instrument Check
Instrument Channel Reactor Low Water Level (LIS-3-58A-D)	(1) (27)	Once/18 Months (28)	Once/day
Instrument Channel Reactor Low Water Level (LIS-3-184 & 185)	(1) (27)	Once/18 Months (28)	Once/day
Instrument Channel Reactor Low Water Level (LIS-3-52 & 62A)	(1) (27)	Once/18 Months (28)	Once/day
Instrument Channel Drywell High Pressure (PIS-64-58E-H)	(1) (27)	Once/18 Months (28)	none
Instrument Channel Drywell High Pressure (PIS-64-58A-D)	(1) (27)	Once/18 Months (28)	none
Instrument Channel Drywell High Pressure (PIS-64-57A-D)	(1) (27)	Once/18 Months (28)	none
Instrument Channel Reactor Low Pressure (PIS-3-74A, PS-3-74A&B) (PIS-68-95, PS-68-95) (PIS-68-96, PS-68-96)	(1) (27)	Once/6 Months (28)	none

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3.2/4.2-44



TABLE 4.2.B (Continued)  
 SURVEILLANCE REQUIREMENTS FOR INSTRUMENTATION THAT INITIATE OR CONTROL THE CSCS

Function	Functional Test	Calibration	Instrument Check
Core Spray Auto Sequencing Timers (Normal Power)	(4)	Once/operating cycle	none
Core Spray Auto Sequencing Timers (Diesel Power)	(4)	Once/operating cycle	none
LPCI Auto Sequencing Timers (Normal Power)	(4)	Once/operating cycle	none
LPCI Auto Sequencing Timers (Diesel Power)	(4)	Once/operating cycle	none
RHRWS A1, B3, C1, D3 Timers (Normal Power)	(4)	Once/operating cycle	none
RHRWS A1, B3, C1, D3 Timers (Diesel Power)	(4)	Once/operating cycle	none
ADS Timer (105 sec.)	(4)	Once/operating cycle	none
ADS Timer (12 1/2 min.) (High Drywell Pressure Bypass Timer)	(4)	Once/operating cycle	none

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