

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT (BFN)  
UNITS 1, 2, AND 3

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE TS-361  
MARKED PAGES

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I. AFFECTED PAGE LIST

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II. MARKED PAGES

See attached.

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AUG 02 1989

## LIMITING CONDITIONS FOR OPERATION

## SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.

UNIT 1

3. During REACTOR 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.

AND  
ASSOCIATED  
VALVES

(NOTE: BECAUSE STANDBY COOLANT SUPPLY CAPABILITY IS NOT A SHORT-TERM REQUIREMENT, A COMPONENT IS NOT CONSIDERED INOPERABLE IF STANDBY COOLANT SUPPLY CAPABILITY CAN BE RESTORED TO SERVICE WITHIN 5 HOURS.)

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

2. No additional surveillance is required.
3. Routine surveillance for these pumps is specified in 4.5.C.1.

3.5/4.5 CORE AND CONTAINMENT COOLING SYSTEMS

AUG 02 1989

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.
3. During Unit 2 REACTOR POWER OPERATION, any two RHRSW pumps (D1, D2, B1, and B2), 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.

AND  
ASSOCIATED  
VALVES

(NOTE: BECAUSE STANDBY COOLANT SUPPLY CAPABILITY IS NOT A SHORT-TERM REQUIREMENT, A COMPONENT IS NOT CONSIDERED INOPERABLE IF STANDBY COOLANT SUPPLY CAPABILITY CAN BE RESTORED TO SERVICE WITHIN 5 HOURS.)

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

2. No additional surveillance is required.
3. Routine surveillance for these pumps is specified in 4.5.C.1.

TABLE 3.2.F  
Surveillance Instrumentation

Minimum # of Operable Instrument Channels	Instrument #	Instrument	Type Indication and Range	Notes
2	LI-3-46 A LI-3-46 B	Reactor Water Level	Indicator - 155" to +60"	(1) (2) (3)
2	PI-3-54 PI-3-61	Reactor Pressure	Indicator 0-1500 psig	(1) (2) (3)
2	PI-64-67B → XR-64-50 <del>PI-64-67</del>	Drywell Pressure	Recorder -15 to +65 psig Indicator -15 to +65 psig	(1) (2) (3)
2	XR-64-50 → TI-64-52AB <del>TI-64-50</del>	Drywell Temperature	Recorder, Indicator 0-400°F	(1) (2) (3)
1	XR-64-52	Suppression Chamber Air Temperature	Recorder 0-400°F	(1) (2) (3)
1	N/A	Control Rod Position	6V Indicating ) Lights )	
1	N/A	Neutron Monitoring	SRM, IRM, LPRM ) 0 to 100% power )	(1) (2) (3) (4)
1	PS-64-67B → <del>PS-64-67</del>	Drywell Pressure	Alarm at 35 psig )	
1	TS-64-52A → <del>TS-64-50</del> and PIS-64-58A → <del>PS-64-58 B</del> and IS-64-67A → <del>IS-64-67</del>	Drywell Temperature and Pressure and Timer	Alarm if temp. ) > 281°F and ) pressure > 2.5 psig ) after 30 minute ) delay )	(1) (2) (3) (4)
1	LI-84-2A	CAD Tank "A" Level	Indicator 0 to 100%	(1)
1	LI-84-13A	CAD Tank "B" Level	Indicator 0 to 100%	(1)

BFN  
Unit 3

3.2/4.2-30

AMENDMENT NO. 168

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TABLE 4.2.F  
MINIMUM TEST AND CALIBRATION FREQUENCY FOR SURVEILLANCE INSTRUMENTATION

<u>Instrument Channel</u>	<u>Calibration Frequency</u>	<u>Instrument Check</u>
1) Reactor Water Level	Once/6 months	Each Shift
2) Reactor Pressure	Once/6 months	Each Shift
3) Drywell Pressure	Once/6 months	Each Shift
4) Drywell Temperature	Once/6 months	Each Shift
5) Suppression Chamber Air Temperature	Once/6 months	Each Shift
8) Control Rod Position	N/A	Each Shift
9) Neutron Monitoring	(2)	Each Shift
10) Drywell Pressure ( <del>PS-64-67</del> ) <i>PS-64-67B</i>	Once/6 months	N/A
11) Drywell Pressure (PS-64-58B)	Once/6 months	N/A
12) Drywell Temperature ( <del>TR-64-52</del> ) <i>TS-64-52A</i>	Once/6 months	N/A
13) Timer ( <del>TS-64-57</del> ) <i>IS-64-67A</i>	Once/6 months	N/A
14) CAD Tank Level	Once/6 months	Once/day
15) Containment Atmosphere Monitors	Once/6 months	Once/day

PSN  
Unit 3

3.2/4.2-53

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## LIMITING CONDITIONS FOR OPERATION

## SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.

UNIT 3

3. During REACTOR POWER OPERATION, both RHRSW pumps B1 and B2, 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.

AND  
ASSOCIATED  
VALVES

(NOTE: BECAUSE STANDBY COOLANT SUPPLY CAPABILITY IS NOT A SHORT-TERM REQUIREMENT, A COMPONENT IS NOT CONSIDERED INCAPABLE IF STANDBY COOLANT SUPPLY CAPABILITY CAN BE RESTORED TO SERVICE WITHIN 5 HOURS.)

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

2. No additional surveillance is required.

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

ENCLOSURE 3

TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY NUCLEAR PLANT (BFN)  
UNITS 1, 2, AND 3

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE TS-361  
REVISED PAGES

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I. AFFECTED PAGE LIST

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		3.5/4.5-10

II. REVISED PAGES

See attached.

### 3.5/4.5 CORE AND CONTAINMENT COOLING SYSTEMS

#### LIMITING CONDITIONS FOR OPERATION

#### SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.
3. During Unit 1 REACTOR POWER OPERATION, both RHRSW pumps D1 and D2 and associated valves 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. (Note: Because standby coolant supply capability is not a short-term requirement, a component is not considered inoperable if standby coolant supply capability can be restored to service within 5 hours.)

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

2. No additional surveillance is required.
3. Routine surveillance for these pumps is specified in 4.5.C.1.

### 3.5/4.5 CORE AND CONTAINMENT COOLING SYSTEMS

#### LIMITING CONDITIONS FOR OPERATION

#### SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.
3. During Unit 2 REACTOR POWER OPERATION, any two RHRSW pumps (D1, D2, B1, and B2) and associated valves 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. (Note: Because standby coolant supply capability is not a short-term requirement, a component is not considered inoperable if standby coolant supply capability can be restored to service within 5 hours.)

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

2. No additional surveillance is required.
3. Routine surveillance for these pumps is specified in 4.5.C.1.

TABLE 3.2.F  
Surveillance Instrumentation

Minimum # of Operable Instrument Channels	Instrument #	Instrument	Type Indication and Range	Notes
2	LI-3-46 A LI-3-46 B	Reactor Water Level	Indicator - 155" to +60"	(1) (2) (3)
2	PI-3-54 PI-3-61	Reactor Pressure	Indicator 0-1500 psig	(1) (2) (3)
2	XR-64-50 PI-64-67B	Drywell Pressure	Recorder -15 to +65 psig Indicator -15 to +65 psig	(1) (2) (3)
2	XR-64-50 TI-64-52AB	Drywell Temperature	Recorder, Indicator 0-400°F	(1) (2) (3)
1	XR-64-52	Suppression Chamber Air Temperature	Recorder 0-400°F	(1) (2) (3)
1	N/A	Control Rod Position	6V Indicating ) Lights )	
1	N/A	Neutron Monitoring	SRM, IRM, LPRM ) 0 to 100% power )	(1) (2) (3) (4)
1	PS-64-67B	Drywell Pressure	Alarm at 35 psig )	
1	TS-64-52A & PIS-64-58A & IS-64-67A	Drywell Temperature and Pressure and Timer	Alarm if temp. ) > 281°F and ) pressure >2.5 psig ) after 30 minute ) delay )	(1) (2) (3) (4)
1	LI-84-2A	CAD Tank "A" Level	Indicator 0 to 100%	(1)
1	LI-84-13A	CAD Tank "B" Level	Indicator 0 to 100%	(1)

TABLE 4.2.F  
MINIMUM TEST AND CALIBRATION FREQUENCY FOR SURVEILLANCE INSTRUMENTATION

<u>Instrument Channel</u>	<u>Calibration Frequency</u>	<u>Instrument Check</u>
1) Reactor Water Level	Once/6 months	Each Shift
2) Reactor Pressure	Once/6 months	Each Shift
3) Drywell Pressure	Once/6 months	Each Shift
4) Drywell Temperature	Once/6 months	Each Shift
5) Suppression Chamber Air Temperature	Once/6 months	Each Shift
8) Control Rod Position	N/A	Each Shift
9) Neutron Monitoring	(2)	Each Shift
10) Drywell Pressure (PS-64-67B)	Once/6 months	N/A
11) Drywell Pressure (PS-64-58B)	Once/6 months	N/A
12) Drywell Temperature (TS-64-52A)	Once/6 months	N/A
13) Timer (IS-64-67A)	Once/6 months	N/A
14) CAD Tank Level	Once/6 months	Once/day
15) Containment Atmosphere Monitors	Once/6 months	Once/day

BFN  
Unit 3

3.2/4.2-53

3.5/4.5 CORE AND CONTAINMENT COOLING SYSTEMS

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

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

2. During REACTOR POWER OPERATION, RHRSW pumps must be OPERABLE and assigned to service as indicated in Table 3.5-1 for the specified time limits.
3. During Unit 3 REACTOR POWER OPERATION, both RHRSW pumps B1 and B2 and associated valves 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. (Note: Because standby coolant supply capability is not a short-term requirement, a component is not considered inoperable if standby coolant supply capability can be restored to service within 5 hours.)

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

2. No additional surveillance is required.
3. Routine surveillance for these pumps is specified in 4.5.C.1.