

June 26, 1984

Docket Nos. 50-259/260/296

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

Dear Mr. Parris:

On June 11, 1984, we issued Amendment Nos. 100, 94 and 67 to Facility Operating License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Units 1, 2 and 3. There were errors on several pages. A set of pages to replace those with errors is enclosed.

We apologize for any inconvenience this may have caused you.

Sincerely,



Richard J. Clark, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:
As stated

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Mr. Hugh G. Parris
Tennessee Valley Authority
Browns Ferry Nuclear Plant, Units 1, 2 and 3

cc:

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Chattanooga, Tennessee 37411

TABLE 3.2.C
INSTRUMENTATION THAT INITIATES ROD BLOCKS

Minimum Operable Channels Per Trip Function (5)	Function	Trip Level Setting
4(1)	APRM Upscale (Flow Bias)	$\leq 0.66H + 42\%$ (2)
4(1)	APRM Upscale (Startup Mode) (8)	$\leq 12\%$
4(1)	APRM Downscale (9)	$\geq 3\%$
4(1)	APRM Inoperative	(10b)
2(7)	RBM Upscale (Flow Bias)	$\leq 0.66H + 40\%$ (2)(13)
2(7)	RBM Downscale (9)	$\geq 3\%$
2(7)	RBM Inoperative	(10c)
6(1)	IRM Upscale (8)	$\leq 108/125$ of full scale
6(1)	IRM Downscale (3) (8)	$\geq 5/125$ of full scale
6(1)	IRM Detector not in Startup Position (8)	(11)
6(1)	IRM Inoperative (8)	(10a)
3(1) (6)	SRM Upscale (8)	$\leq 1 \times 10^5$ counts/sec.
3(1) (6)	SRM Downscale (4) (8)	≥ 3 counts/sec.
3(1) (6)	SRM Detector not in Startup Position (4)(8)	(11)
3(1) (6)	SRM Inoperative (8)	(10a)
2(1)	Flow Bias Comparator	$\leq 10\%$ difference in recirculation flows
2(1)	Flow Bias Upscale	$\leq 115\%$ recirculation flow
1	Rod Block Logic	N/A
2(1)	RCSC Restraint (PS85-61A,B)	147 psig turbine first stage pressure
1(12)	High Water Level in West Screen Discharge Tank (1.S-85-451.)	≤ 25 gal.
1(12)	High Water Level in East Screen Discharge Tank (1.S-85-451)	≤ 25 gal.

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NOTES FOR TABLE 3.2.C

1. The minimum number of operable channels for each trip function is detailed for the startup and run positions of the reactor mode selector switch. The SRM, IRM, and APRM (startup mode), blocks need not be operable in "run" mode, and the APRM (flow biased) rod blocks need not be operable in "startup" mode.

With the number of OPERABLE channels less than required by the minimum OPERABLE channels per trip function requirement, place at least one inoperable channel in the tripped condition within one hour.

2. W is the recirculation loop flow in percent of design. Trip level setting is in percent of rated power (3293 Mwt).

A ratio of FRP/CMFLPD ≤ 1.0 is permitted at reduced power. See specification 2.1 for APRM control rod block setpoint.

3. IRM downscale is bypassed when it is on its lowest range.
4. SRM's A and C downscale functions are bypassed when IRM's A, C, E, and G are above range 2. SRM's B and D downscale function is bypassed when IRM's B, D, F, and H are above range 2.

SRM detector not in startup position is bypassed when the count rate is ≥ 100 CPS or the above condition is satisfied.

5. During repair or calibration of equipment, not more than one SRM or RBM channel nor more than two APRM or IRM channels may be bypassed. Bypassed channels are not counted as operable channels to meet the minimum operable channel requirements. Refer to section 3.10.B for SRM requirements during core alterations.
6. IRM channels A, E, C, G all in range 8 or above bypasses SRM channels A and C functions.

IRM channels B, F, D, H all in range 8 or above bypasses SRM channels B and D functions.

7. The following operational restraints apply to the RIM only.

- a. Both RBM channels are bypassed when reactor power is $\leq 30\%$ and when a peripheral control rod is selected.
- b. The RIM need not be operable in the "startup" position of the reactor mode selector switch.
- c. Two RIM channels are provided and only one of these may be bypassed from the console. An RIM channel may be out of service for testing and/or maintenance provided this condition does not last longer than 24 hours in any thirty day period.
- d. If minimum conditions for Table 3.2.C are not met, administrative controls, shall be immediately imposed to prevent control rod withdrawal.

NOTES FOR TABLE 3.2.C

1. The minimum number of operable channels for each trip function is detailed for the startup and run positions of the reactor mode selector switch. The SRM, IRM, and APRM (startup mode), blocks need not be operable in "run" mode, and the APRM (flow biased) rod blocks need not be operable in "startup" mode.

With the number of OPERABLE channels less than required by the minimum OPERABLE channels per trip function requirement, place at least one inoperable channel in the tripped condition within one hour.

2. W is the recirculation loop flow in percent of design. Trip level setting is in percent of rated power (3293 MWt).

A ratio of FRP/CMFLPD ≤ 1.0 is permitted at reduced power. See specification 2.1 for APRM control rod block setpoint.

3. IRM downscale is bypassed when it is on its lowest range.
4. SRM's A and C downscale functions are bypassed when IRM's A, C, E, and G are above range 2. SRM's B and D downscale function is bypassed when IRM's B, D, F, and H are above range 2.

SRM detector not in startup position is bypassed when the count rate is ≥ 100 CPS or the above condition is satisfied.

5. During repair or calibration of equipment, not more than one SRM or REM channel nor more than two APRM or IRM channels may be bypassed. Bypassed channels are not counted as operable channels to meet the minimum operable channel requirements. Refer to section 3.10.B for SRM requirements during core alterations.
6. IRM channels A, E, C, G all in range 8 or above bypasses SRM channels A and C functions.

IRM channels B, F, D, H all in range 8 or above bypasses SRM channels B and D functions.

7. The following operational restraints apply to the RRM only.

- a. Both RBM channels are bypassed when reactor power is $\leq 30\%$ and when a peripheral control rod is selected.
- b. The RRM need not be operable in the "startup" position of the reactor mode selector switch.
- c. Two RBM channels are provided and only one of these may be bypassed from the console. An RRM channel may be out of service for testing and/or maintenance provided this condition does not last longer than 24 hours in any thirty day period.
- d. If minimum conditions for Table 3.2.C are not met, administrative controls, shall be immediately imposed to prevent control rod withdrawal.

NOTES FOR TABLE 3.2.C

1. The minimum number of operable channels for each trip function is detailed for the startup and run positions of the reactor mode selector switch. The SRM, IRM, and APRM (startup mode), blocks need not be operable in "run" mode, and the APRM (flow biased) rod blocks need not be operable in "startup" mode.

With the number of OPERABLE channels less than required by the minimum OPERABLE channels per trip function requirement, place at least one inoperable channel in the tripped condition within one hour.

2. W is the recirculation loop flow in percent of design. Trip level setting is in percent of rated power (3293 MWt).

A ratio of FRP/CMFLPD ≤ 1.0 is permitted at reduced power. See specification 2.1 for APRM control rod block setpoint.

3. IRM downscale is bypassed when it is on its lowest range.
4. SRM's A and C downscale functions are bypassed when IRM's A, C, E, and G are above range 2. SRM's B and D downscale function is bypassed when IRM's B, D, F, and H are above range 2.

SRM detector not in startup position is bypassed when the count rate is ≥ 100 CPS or the above condition is satisfied.

5. During repair or calibration of equipment, not more than one SRM or RBM channel nor more than two APRM or IRM channels may be bypassed. Bypassed channels are not counted as operable channels to meet the minimum operable channel requirements. Refer to section 3.10.B for SRM requirements during core alterations.
6. IRM channels A, E, C, G all in range 8 or above bypasses SRM channels A and C functions.

IRM channels B, F, D, H all in range 8 or above bypasses SRM channels B and D functions.

7. The following operational restraints apply to the RIM only.

- a. Both RBM channels are bypassed when reactor power is $\leq 30\%$ and when a peripheral control rod is selected.
- b. The RIM need not be operable in the "startup" position of the reactor mode selector switch.
- c. Two RIM channels are provided and only one of these may be bypassed from the console. An RIM channel may be out of service for testing and/or maintenance provided this condition does not last longer than 24 hours in any thirty day period.
- d. If minimum conditions for Table 3.2.C are not met, administrative controls, shall be immediately imposed to prevent control rod withdrawal.