

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

DUKE POWER COMPANY

DOCKET NO. 50-269

OCONEE NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.83 License No. DPR-38

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Duke Power Company (the licensee) dated September 22, 1976, as supplemented September 11, 1979, and the application dated November 16, 1979, as superseded March 12, 1980, and supplemented April 30, 1980, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the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 applications, 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, Facility Operating License No. DPR-38 is hereby amended by revising paragraph 3.B and adding paragraph 3.G. as follows and by changing the Technical Specifications as indicated in the attachment to this license amendment:
 - 3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 83, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.G The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

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- 1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
- 2. Identification of the procedures used to measure the values of the critical parameters;
- 3. Identification of process sampling points;
- 4. Procedure for the recording and management of data;
- 5. Procedures defining corrective actions of off control point chemistry conditions; and
- 6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.
- 3. Except for paragraph 3.G this license amendment is effective as of the date of its issuance. Paragraph 3.G is effective within 60 days from the date of issuance.

FOR THE NUCLEAR' REGULATORY COMMISSION

Robert W. Reid, Chief Operating Reactors Branch #4 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: June 12, 1980



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

DUKE POWER COMPANY

DOCKET NO. 50- 270

OCONEE NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 83 License No. DPR-47

1. The Nuclear Regulatory Commission (the Commission) has found that:

- A. The application for amendment by Duke Power Company (the licensee) dated September 22, 1976, as supplemented September 11, 1979, and the application dated November 16, 1979, as superseded March 12, 1980, and supplemented April 30, 1980, comply 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 applications, 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, Facility Operating License No. DPR-47 is hereby amended by revising paragraph 3.B and adding paragraph 3.G. as follows and by changing the Technical Specifications as indicated in the attachment to this license amendment:
 - 3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 83, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.G The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- 1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
- 2. Identification of the procedures used to measure the values of the critical parameters;
- 3. Identification of process sampling points;
- 4. Procedure for the recording and management of data;
- 5. Procedures defining corrective actions of off control point chemistry conditions; and
- 6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.
- 3. Except for paragraph 3.G this license amendment is effective as of the date of its issuance. Paragraph 3.G is effective within 60 days from the date of issuance.

FOR THE NUCLEAR' REGULATORY COMMISSION

Robert W. Reid, Chief Operating Reactors Branch #4 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: June 12, 1980



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 200555

DUKE POWER COMPANY

DOCKET NO. 50-287

OCONEE NUCLEAR STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 80 License No. DPR-55

1. The Nuclear Regulatory Commission (the Commission) has found that:

- A. The application for amendment by Duke Power Company (the licensee) dated September 22, 1976, as supplemented September 11, 1979, and the application dated November 16, 1979, as superseded March 12, 1980, and supplemented April 30, 1980, comply 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 applications, 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, Facility Operating License No. DPR-55 is hereby amended by revising paragraph 3.B and adding paragraph 3.G. as follows and by changing the Technical Specifications as indicated in the attachment to this license amendment:
 - 3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 80, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.G The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- 1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
- 2. Identification of the procedures used to measure the values of the critical parameters;
- 3. Identification of process sampling points;
- 4. Procedure for the recording and management of data;
- 5. Procedures defining corrective actions of off control point chemistry conditions; and
- 6. A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.
- 3. Except for paragraph 3.G this license amendment is effective as of the date of its issuance. Paragraph 3.G is effective within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert W. Reid, Chief Operating Reactors Branch #4 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: June 12, 1980

-2-

ATTACHMENTS TO LICENSE AMENDMENTS

AMENDMENT NO.83 TO DPR-38

AMENDMENT NO.83 TO DPR-47

AMENDMENT NO. 80 TO DPR-55

DOCKETS NOS. 50-269, 50-270 AND 50-287

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment numbers and contain vertical lines indicating the area of change.

REMOVE PAGES

INSERT PAGES

····		· · · · · · · · · · · · · · · · · · ·	
viii & ix	,	•	viii & ix
2.1-2 & 2.1-3			2.1-2 & 2.1-3
2.1-3b	, · . ;		2.1-3b
2.1-8	7 5 .		2.1-8
2.3-2 & 2.3-3			2.3-2 & 2.3-3
2.3-9			2.3-9
2.3-12	·		2.3-12
3.5-9 & 3.5-10			3.5-9 & 3.5-10
3.5-16 & 3.5-16a	•		3.5-16 & 3.5-16a
3.5-16b			
3.5-19 & 3.5-19a		:	3.5-19 & 3.5-19a
3.5-19b		•	***********
3.5-22		· · · · · · · · · · · · · · · · · · ·	3.5-22
3.5-22a & 3.5-22b			
3.5-25 & 3.5-25a			3.5-25 & 3.5-25a
3.5-25b		• • •	

LIST OF FIGURES (CONT'D)

r i		Fage
Figure		
3.1.2-3A	Reactor Coolant System Inservice Leak and Hydrostatic Test Heatup and Cooldown Limitation - Unit 1	3.1-7c
3.1.2-3B	Reactor Coolant System Inservice Leak and Hydrostatic Test Heatup and Cooldown Limitation - Unit 2	3.1-7d
3.1.2-30	Reactor Coolant System Inservice Leak and Hydrostatic Test Heatup and Cooldown Limitation - Unit 3	3.1-7e
3.1.10-1	Limiting Pressure vs. Temperature Curve for 100 STD cc/Liter H ₂ 0	3.1-22
3.5.2-141	Rod Position Limits for Four Pump Operation - Unit 1	3.5-15
3.5.2-1A2	Rod Position Limits for Four Pump Operation - Unit 1	3.5-15a
3.5.2-1B1	Rod Position Limits for Four Pump Operation - Unit 2	3.5-16
3.5.2-1B2	Rod Position Limits for Four Pump Operation - Unit 2	3.5-16a
3.5.2-183	Deleted	. •
3.5.2-101	Rod Position Limits for Four Pump Operation - Unit 3	3.5-17
3 5 2-102	Rod Position Limits for Four Pump Operation - Unit 3	3.5-17a
3 5 2-103	Rod Position Limits for Four Pump Operation - Unit 3	3.5-17b
3 5 2 21	Rod Position Limits for 2 and 3 Pump Operation - Unit 1	3.5-18
3.J.L-LAT	Rod Position Limits for 2 and 3 Pump Operation - Unit 1	3.5 -18a
3.5.2-201	Rod Position Limits for 2 and 3 Pump Operation - Unit 2	3.5-19
3.5.2-201	Rod Position Limits for 2 and 3 Pump Operation - Unit 2	3.5-19a
3.5.2-283	Deleted Rod Position Limits for 2 and 3 Rump Operation - Unit 3	3.5-20
3 5 2-202	Rod Position Limits for 2 and 3 Pump Operation - Unit 3	3.5-20a
3 5 2+203	Rod Position Limits for 2 and 3 Pump Operation - Unit 3	3.5-206
5.5.2-200 5 E 5 201	Operational Power Imbalance Envelope - Unit 1	3.5-21
3.3.2+3A1	Operational Power Imbalance Envelope - Unit 1	3.5-21a
3.5.2-3A2	Operational Power Imbalance Envelope - Unit 2	3.5-22
3.5.2-3B		
3.5.2-3B2	2 Deleted	

LIST OF FIGURES (CONT"D)

Figure		Page
3.5.2-3B3	Deleted	
3.5.2-301	Operational Power Imbalance Envelope - Unit 3	3.5-23
3.5.2-3C2	Operational Power Imbalance Envelope - Unit 3	3.5-23a
3.5.2-303	Operational Power Imbalance Envelope - Unit 3	3,5-235
3.5.2-4A1	APSR Position Limits - Unit 1	3.5-24
3.5.2-4A2	APSR Position Limits - Unit 1	3.5.24a
3.5.2-4B1	APSR Position Limits - Unit 2	3.5-25
3.5.2-4B2	APSR Position Limits - Unit 2	3 .5-25a
3.5.2-4B3	Deleted	. •
3.5.2-401	APSR Position Limits - Unit 3	3.5-26
3.5.2-4C2	APSR Position Limits - Unit 3	3.5-26a
3.5.2-4C3	APSR Position Limits - Unit 3	3.5-26b
3.5.2-5	LOCA - Limited Maximum Allowable Linear Heat	3.5-27
3.5.4-1	Incore Instrumentation Specification Axial Imbalance Indication	3.5-31
3.5.4-2	Incore Instrumentation Specification Radial Flux Tilt Indication	3.5-32
3.5-4-3	Incore Instrumentation Specification	3_5-33
4.5-1-1	High Pressure Injection Pump Characteristics	4.5-4
4.5-1-2	Low Pressure Injection Pump Characteristics	4.5-5
4.5.2-1	Acceptance Curve for Reactor Building Spray Pumps	4.5-9
6.1-1	Station Organization Chart	5.1-7
6.1-2	Management Organization Chart	5.1-8

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can be related to DNB through the use of the BAW-2 correlation (1). The BAW-2 correlation has been developed to predict DNB and the location of DNB for axially uniform and non-uniform heat flux distributions. The local DNB ratio (DNBR), defined as the ratio of the heat flux that would cause DNB at a particular core location to the actual heat flux, is indicative of the margin to DNB. The minimum value of the DNBR, during steady-state operation, normal operational transients, and anticipated transients is limited to 1.30. A DNBR of 1.30 corresponds to a 95 percent probability at a 95 percent confidence level that DNB will not occur; this is considered a conservative margin to DNB for all operating conditions. The difference between the actual core outlet pressure and the indicated reactor coolant system pressure has been considered in determining the core protection safety limits. The difference in these two pressures is nominally 45 psi; however, only a 30 psi drop was assumed in reducing the pressure trip setpoints to correspond to the elevated location where the pressure is actually measured.

The curve presented in Figure 2.1-1A represents the conditions at which a minimum DNBR of 1.30 is predicted for the maximum possible thermal power (112 percent) when four reactor coolant pumps are operating (minimum reactor coolant flow is 106.5 percent of 131.3 x 10^6 lbs/hr.). This curve is based on the combination of nuclear power peaking factors, with potential effects of fuel densification and rod bowing, which result in a more conservative DNBR than any other shape that exists during normal operation.

The curves of Figure 2.1-2A are based on the more restrictive of two thermal limits and include the effects of potential fuel densification and rod bowing:

- 1. The 1.30 DNBR limit produced by the combination of the radial peak, axial peak and position of the axial peak that yields no less than a 1.30 DNBR.
- 2. The combination of radial and axial peak that causes central fuel melting at the hot spot. The limit is 20.05 kw/ft for Unit 1.

Power peaking is not a directly observable quantity and therefore limits have been established on the bases of the reactor power imbalance produced by the power peaking.

The specified flow rates for Curves 1, 2, and 3 of Figure 2.1-2A correspond to the expected minimum flow rates with four pumps, three pumps, and one pump in each loop, respectively.

The curve of Figure 2.1-1A is the most restrictive of all possible reactor coolant pump-maximum thermal power combinations shown in Figure 2.1-3A.

The maximum thermal power for three-pump operation is 87.18 percent due to a power level trip produced by the flux-flow ratio 74.7 percent flow x 1.08 = 80.68 percent power plus the maximum calibration and instrument error. The maximum thermal power for other coolant pump conditions is produced in a similar manner.

Amendments Nos. 83, 83 & 80

2.1-2

For Figure 2.1-3A, a pressure-temperature point above and to the left of the curve would result in a DNBR greater than 1.30.

References

(1) Correlation of Critical Heat Flux in a Bundle Cooled by Pressurized Water, BAW-10000, March 1970.

(2) Oconee 1, Cycle 4 - Reload Report - BAW-1447, March 1977.

- 1. The 1.30 DNBR limit produced by the combination of the radial peak, axial peak and position of the axial peak that yields no less than a 1.30 DNBR.
- 2. The combination of radial and axial peak that causes central fuel melting at the hot spot. The limit is 20.15 kw/ft for Unit 2.

Power peaking is not a directly observable quantity, and, therefore, limits have been established on the bases of the reactor power imbalance produced by the power peaking.

The specified flow rates for Curves 1, 2, and 3 of Figure 2.1-2B correspond to the expected minimum flow rates with four pumps, three pumps, and one pump in each loop, respectively.

The curve of Figure 2.1-1B is the most restrictive of all possible reactor coolant pump-maximum thermal power combinations shown in Figure 2.1-3B.

The maximum thermal power for three-pump operation is 87.18 percent due to a power level trip produced by the flux-flow ratio 74.7 percent flow x 1.08 = 80.68 percent power plus the maximum calibration and instrument error. The maximum thermal power for other coolant pump conditions is produced in a similar manner.

For each curve of Figure 2.1-3B, a pressure-temperature point above and to the left of the curve would result in a DNBR greater than 1.30 or a local quality at the point of minimum DNBR less than 22 percent for that particular reactor coolant pump situation. The 1.30 DNBR curve for four-pump operation is more restrictive than any other reactor coolant pump situation because any pressure/temperature point above and to the left of the fourpump curve will be above and to the left of the other curves.

References

- (1) Corelation of Critical Heat Flux in a Bundle Cooled by Pressurized Water, BAW-10000, March 1970.
- (2) Oconee 2, Cycle 4- Reload Report BAW-1491, August 1978.
- (3) Oconee 2, Cycle 5 Reload Report BAW-1565.

Amendments Nos. 83, 83 & 80

2.1-3b



Amendments Nos. 83, 83 & 80

2.1-8



During normal plant operation with all reactor coolant pumps operating, reactor trip is initiated when the reactor power level reaches 105.5% of rated power. Adding to this the possible variation in trip setpoints due to calibration and instrument errors, the maximum actual power at which a trip would be actuated could be 112%, which is more conservative than the value used in the safety analysis. (4)

Overpower Trip Based on Flow and Imbalance

The power level trip setpoint produced by the reactor coolant system flow is based on a power-to-flow ratio which has been established to accommodate the most severe thermal transient considered in the design, the loss-of-coolant flow accident from high power. Analysis has demonstrated that the specified power-to-flow ratio is adequate to prevent a DNBR of less than 1.3 should a low flow condition exist due to any electrical malfunction.

The power level trip setpoint produced by the power-to-flow ratio provides both high power level and low flow protection in the event the reactor power level increases or the reactor coolant flow rate decreases. The power level trip setpoint produced by the power-to-flow ratio provides overpower DNB protection for all modes of pump operation. For every flow rate there is a maximum permissible power level, and for every power level there is a minimum permissible low flow rate. Typical power level and low flow rate combinations for the pump situations of Table 2.3-1A are as follows:

- 1. Trip would occur when four reactor coolant pumps are operating if power is 108% and reactor flow rate is 100%, or flow rate is 92.59% and power level is 100%.
- 2. Trip would occur when three reactor coolant pumps are operating if power is 80.68% and reactor flow rate is 74.7% or flow rate is 69.44% and power level is 75%.
- 3. Trip would occur when one reactor coolant pump is operating in each loop (total of two pumps operating) if the power is 52.92 and reactor flow rate is 49.0% or flow rate is 45.37% and the power level is 49%.

The flux-to-flow ratios account for the maximum calibration and instrument errors and the maximum variation from the average value of the RC flow signal in such a manner that the reactor protective system receives a conservative indication of the RC flow.

For safety calculations the maximum calibration and instrumentation errors for the power level trip were used.

The power-imbalance boundaries are established in order to prevent reactor thermal limits from being exceeded. These thermal limits are either power peaking kw/ft limits or DNBR limits. The reactor power imbalance (power in the top half of core minus power in the bottom half of core) reduces the power level trip produced by the power-to-flow ratio such that the boundaries of Figure 2.3-2A - Unit 1 are produced. The power-to-flow ratio reduces the power 2.3-2B - Unit 2

2.3-2C - Unit 3

Amendments Nos. 83, 83 & 80

level trip and associated reactor power/reactor power-imbalance boundaries by 1.08% - Unit 1 for 1% flow reduction.

1.08% - Unit 2 1.08% - Unit 3

Pump Monitors

The pump monitors prevent the minimum core DNBR from decreasing below 1.3 by tripping the reactor due to the loss of reactor coolant pump(s). The circuitry monitoring pump operational status provides redundant trip protection for DNB by tripping the reactor on a signal diverse from that of the power-to-flow ratio. The pump monitors also restrict the power level for the number of pumps in operation.

Reactor Coolant System Pressure

During a startup accident from low power or a slow rod withdrawal from high power, the system high pressure setpoint is reached before the nuclear overpower trip setpoint. The trip setting limit shown in Figure 2.3-1A - Unit 1 2.3-1B - Unit 2

2.3-1C - Unit 3

for high reactor coolant system pressure (2355 psig) has been established to maintain the system pressure below the safety limit (2750 psig) for any design transient. (1)

The	low	pressure	(1800)	psig	and	variable	low	pressure	(11.14	T4706)	trip
		-	(1800)	psig					(11.14	T ^{out} -4706)	
			(1800)	psig				1	(11.14	Tout-4706)	

setpoints shown in Figure 2.3-1A have been established to maintain the DNB 2.3-1B

2.3-1C

ratio greater than or equal to 1.3 for those design accidents that result in a pressure reduction. (2,3)

Due to the calibratic	on and in	istrumei	itation en	rors,	the safe	ty analysis	used a
variable low reactor	coolant	system	pressure	trip v	value of	(11.14 T	- 4746)
	•			•		(11.14 T ^{out}	- 4746)
·		· · ·		-		(11.14 T ^{out}	- 4746)

Coolant Outlet Temperature

The high reactor coolant outlet temperature trip setting limit (619°F) shown in Figure 2.3-1A has been established to prevent excessive core coolant 2.3-1B

2.3-10

temperatures in the operating range. Due to calibration and instrumentation errors, the safety analysis used a trip setpoint of 620°F.

Reactor Building Pressure

The high reactor building pressure trip setting limit (4 psig) provides positive assurance that a reactor trip will occur in the unlikely event of a loss-ofcoolant accident, even in the absence of a low reactor coolant system pressure trip.

Amendments Nos. 83, 83 & 80 2.3-3





PROTECTIVE SYSTEM MAXIMUM ALLOWABLE SETPOINTS UNIT 2 OCONEE NUCLEAR STATION Figure 2.3.2B

2.3-9

Table 2.3-1B Unit 2

Reactor Protective System Trip Setting Limits

		· · ·	· · · · · ·	One Reactor	
		Four Reactor	Three Reactor	Coolant Pump	
	· .	Coolant Pumps	Coolant Pumps	Sach Loon	
		Operating Rever	Operating (Operating Power	(Operating Power	Shutdown
	PDC Composit	-100% Pated)	-75% Rated)	-497 Rated)	Rynass
	RFS Segment	- TOUR Rated)	75 A Racca)		Printer .
1.	Nuclear Power Max. (% Rated)	105.5	105.5	105.5	5.0 ⁽³⁾
"	Nuclear Dover Nev Raced	108 times flow	1.08 times flow	1.08 times flow	Bypassed
2.	on Flow (2) and [mbalance.	minus reduction	minus reduction	minus reduction	-31 :
	(% Rated)	due to imbalance	due to imbalance	due to imbalance	• *
				and the second	en a la recentra
3.	Nuclear Power Max. Based	NA	NA	55%	Bypassed
	on Pump Monitors, (% Rated)		- · · · · · · · · · · · · · · · · · · ·	. 1	
		0755	0055		1720(4)
4.	High Reactor Coolant System	2355	2355	2355	1720
	Pressure, psig, nax.				
5	Low Reactor Coolant System	1800	1800	1800	Bypassed
J	Pressure, psig. Min.				
	11000010, P-18,	(D)	(I)	(1)	·
6.	Variable Low Reactor Coolant	$(11.14 T_{out} - 4706)^{(1)}$	$(11.14 T_{out} - 4706)^{(1)}$	$(11.14 T_{out} - 4706)^{(1)}$	Bypassed
	System Pressure psig, Min.	out	Juc		
		(10)	(10	(10	610
1.	Reactor Coolant Temp. F., Max.	619	619	019	019
0	Nich Desstar Building	4	4	4	4
ō.	Alga Reactor Building	•			
	ricsaure, parg, nas.				and the second second
					1. State 1.
(1)	T is in degrees Fahrenheit ("	BJ.			· · ·

(2) Reactor Coolant System Flow, %.

(3) Administratively controlled reduction set only during reactor shutdown.

(4) Automatically set when other segments of the RPS are bypassed.

2.3-12

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- f. If the maximum positive quadrant power tilt exceeds the Maximum Limit of Table 3.5-1, the reactor shall be shut down within 4 hours. Subsequent reactor operation is permitted for the purpose of measurement, testing, and corrective action provided the thermal power and the Nuclear Overpower Trip Setpoints allowable for the reactor coolant pump combination are restricted by a reduction of 2% of thermal power for each 1% tilt for the maximum tilt observed prior to shutdown.
- g. Quadrant power tilt shall be monitored on a minimum frequency of once every 2 hours during power operation above 15% full power.

3.5.2.5 Control Rod Positions

- a. Technical Specification 3.1.3.5 does not prohibit the exercising of individual safety rods as required by Table 4.1-2 or apply to inoperable safety rod limits in Technical Specification 3.5.2.2.
- b. Except for physics tests, operating rod group overlap shall be 25% ± 5% between two sequential groups. If this limit is exceeded, corrective measures shall be taken immediately to achieve an acceptable overlap. Acceptable overlap shall be attained within two hours or the reactor shall be placed in a hot shutdown condition within an additional 12 hours.
 - Position limits are specified for regulating and axial power shaping control rods. Except for physics tests or exercising control rods, the regulating control rod insertion/withdrawal limits are specified on figures 3.5.2-1A1 and 3.5.2-1A2 (Unit 1); 3.5.2-1B1 and 3.5.2-1B2 (Unit 2); 3.5.2-1C1, 3.5.2-1C2 and 3.5.2-1C3 (Unit 3) for four pump operation, and on figures 3.5.2-2A1 and 3.5.2-2A2 (Unit 1), 3.5.2-2B1 and 3.5.2-2B2 (Unit 2); 3.5.2-2C1, 3.5.2-2C2 and 3.5.2-2C3 (Unit 3) for two or three pump operation. Also, excepting physics tests or exercising control rods, the axial power shaping control rod insertion/withdrawal limits are specified on figures 3.5.2-4A1, and 3.5.2-4A2 (Unit 1); 3.5.2-4B1 and 3.5.2-4B2 (Unit 2); 3.5.2-4C1, 3.5.2-4C2, and 3.5.2-4C3 (Unit 3).

If the control rod position limits are exceeded, corrective measures shall be taken immediately to achieve an acceptable control rod position. An acceptable control rod position shall then be attained within two hours. The minimum shutdown margin required by Specification 3.5.2.1 shall be maintained at all times.

3.5.2.6 Xenon Reactivity

Except for physics tests, reactor power shall not be increased above the powerlevel-cutoff shown in Figures 3.5.2-1A1, and 3.5.2-1A2 for Unit 1; Figures 3.5.2-1B1, and 3.5.2-1B2, 3.5.2-1C3 for Unit 3 unless one of the following conditions is satisfied:

- 1. Xenon reactivity did not deviate more than 10 percent from the equilibrium value for operation at steady state power.
- 2. Xenon reactivity deviated more than 10 percent but is now within 10 percent of the equilibrium value for operation at steady state rated power and has passed its final maximum or minimum peak during is approach to its equilibrium value for operation at the power level cutoff.
- 3. Except for xenon free startup (when 2. applies), the reactor has operated within a range of 87 to 92 percent of rated thermal power for a period exceeding 2 hours.
- 3.5.2.7 Reactor power imbalance shall be monitored on a frequency not to exceed two hours during power operation above 40 percent rated power. Except for physics tests, imbalance shall be maintained within the envelope defined by Figures 3.5.2-3A1, 3.5.2-3A2, 3.5.2-3B1, 3.5.2-3C1, 3.5.2-3C2, and 3.5.2-3C3. If the imbalance is not within the envelope defined by these figures, corrective measures shall be taken to achieve an acceptable imbalance. If an acceptable imbalance is not achieved within two hours, reactor power shall be reduced until imbalance limits are met.
- 3.5.2.8 The control rod drive patch panels shall be locked at all times with limited access to be authorized by the manager or his designated alternate.



ROD POSITION LIMITS FOR FOUR-PUMP OPERATION FROM 0 TO 150 ± 10 EFPD UNIT 2 OCONEE NUCLEAR STATION Figure 3.5.2-181

3.5-16



Group 6

ROD POSITION LIMITS FOR FOUR PUMP OPERATION FROM 150 ± 10 TO 360 ± 10 EFPD UNIT 2 OCONEE NUCLEAR STATION Figure 3.5.2-1B2

3.5-16a



Amendments Nos. 83, 83 & 80 3.5-19

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Figure 3.5.2-281

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3.5-22

RESTRICTED REGION

OPERATIONAL POWER IMBALANCE ENVELOPE FOR OPERATION FROM 0 TO 360 ± 10 EFPD UNIT 2 OCONEE NUCLEAR STATION Figure 3.5.2-3B1



APSR POSITION LIMITS FOR OPERATION FROM 0 TO 150 ± 10 EFPD UNIT 2 OCONEE NUCLEAR STATION Figure 3.5.2-481

Amendments Nos. 83, 83 & 80

& 80 _{3.5-}

3.5-25



APSR POSITION LIMITS FOR OPERATION FROM 150 ⁺/₊ 10 EFPD TO 360 ⁺/₊ 10 EFPD Unit 2 OCONEE NUCLEAR STATION Figure 3.5.2-4B2

Amendments Nos. 83, 83 & 80

3.5-25a