



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

November 8, 1985

Docket No. 50-416

Mr. J. B. Richard  
Senior Vice President, Nuclear  
Mississippi Power & Light Company  
P.O. Box 23054  
Jackson, Mississippi 39205

Dear Mr. Richard:

Subject: Issuance of Amendment No.7 to Facility Operating License  
NPF-29 Grand Gulf Nuclear Station, Unit No. 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No.7 to Facility Operating License NPF-29 for the Grand Gulf Nuclear Station, Unit No. 1, located in Claiborne County, Mississippi. This amendment is in response to requests in Item 12 of the attachment to your letter dated August 12, 1985. The other changes requested in that letter will be addressed in a future action.

The amendment modifies the Technical Specifications related to valves listed in Tables 3.3.7.4-1, 3.6.4-1, and 4.3.2-1 and electrical protective devices listed in Tables 3.8.4.1-1 and 3.8.4.2-1. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No.7 to Facility Operating License NPF-29 is enclosed.

Notice of issuance will be included in the Commission's next bi-monthly Federal Register notice.

Sincerely,

*for* *E. G. Adensam*  
Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Enclosures:

1. Amendment No. 7
2. Safety Evaluation

cc w/enclosures:  
See next page

RESTRICTED MATERIAL  
Certified By *John M. Clem*

8511200330 851108  
PDR ADOCK 05000416  
P PDR

Mr. Jackson B. Richard  
Mississippi Power & Light Company

Grand Gulf Nuclear Station

cc:

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Novem 8, 1985

AMENDMENT NO. 7 TO FACILITY OPERATING LICENSE NO. NPF-29 - Grand Gulf, Unit 1

DISTRIBUTION:

Docket No. 50-416

NRC PDR

Local PDR

NSIC

PRC System

LB #4 r/f

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INTEGRATED ORIGINAL  
Certified By *[Signature]*



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

MISSISSIPPI POWER & LIGHT COMPANY

MIDDLE SOUTH ENERGY, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7  
License No. NPF-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Grand Gulf Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-29 filed by the Mississippi Power and Light Company acting for itself, Middle South Energy, Inc., and South Mississippi Electric Power Association (the licensees), dated August 12, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 set forth in 10 CFR Chapter I;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
  - E. The issuance of this license 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 hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C(2) of Facility Operating License No. NPF-29 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through

8511200332 851108  
PDR ADOCK 05000416  
P PDR

Amendment No. 7 and the Environmental Protection Plan contained in Appendix B are hereby incorporated into this license. Mississippi Power & Light Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*for*   
Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Enclosure:  
Technical Specification Changes

Date of Issuance: November 8, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 7

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>Amended</u> <u>Page</u>	<u>Overleaf</u> <u>Page</u>
3/4 3-71	3/4 3-72
3/4 4-11	3/4 4-12
3/4 6-30	3/4 6-29
3/4 6-31	
3/4 6-38	3/4 6-37
3/4 8-32	3/4 8-31
3/4 8-32a (new page)	
3/4 8-47	3/4 8-48

INSTRUMENTATION

TABLE 3.3.7.4-1 (Continued)

REMOTE SHUTDOWN SYSTEM CONTROLS

<u>CONTROL</u>	<u>MINIMUM CHANNELS OPERABLE</u>	
	<u>Div 1</u>	<u>Div 2</u>
12. RHR Injection Valves	2 <sup>b</sup>	2 <sup>b</sup>
13. RHR Test Line Valve	1	1
14. RHR HX Cond. to RCIC Valve	1	1
15. RHR HX Flow to Suppression Pool Valve	1	1
16. RHR Discharge to Radwaste Valve	1	1
17. RCIC Steam to RHR HX Valve	2 <sup>b</sup>	2 <sup>b</sup>
18. Diesel Generator HX Inlet Valve	1	1
19. Safety/Relief Valves	6 <sup>b</sup>	6 <sup>b</sup>
20. RHR to RCIC Head Spray Line Valve	1	NA
21. RCIC Turbine Flow Controller	1	NA
22. RCIC Suction Flow Suppression Pool Valve	1	NA
23. RCIC Injection Shutoff Valve	1	NA
24. RCIC Suction From CST	1	NA
25. RCIC Recirc. Main Flow Bypass Valve	1	NA
26. RCIC Test RTN to CST IB Valve	1	NA
27. RCIC Test RTN to CST OB Valve	1	NA
28. Steam to RCIC Turbine Valve	1	NA
29. RCIC Turbine Trip & Throttle Valve	1	NA
30. RCIC Turbine Cooling Water Valve	1	NA
31. RCIC Turbine Local Control Select Switch	1	NA
32. RCIC Gland Seal Compressor	1	NA
33. Shutdown Cooling Isolation Valve Reset Switch	1	1

NOTE: a. 1 per cooling tower fan  
b. 1 per valve

INSTRUMENTATION

TABLE 4.3.7.4-1

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure	M	R
2. Reactor Vessel Water Level	M	R
3. Suppression Pool Water Level	M	R
4. Suppression Pool Water Temperature	M	R
5. RHR System Flow	M	R
6. Standby Service Water System Flow	M	R
7. RCIC Turbine Speed	M	R
8. Condensate Storage Tank Level	M	R

TABLE 3.4.3.2-1

REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>SYSTEM</u>
E21-F005 E21-F006	LPCS
E22-F004 E22-F005	HPCS
E12-F008 E12-F009 E12-F023 E12-F041 A, B, C E12-F042 A, B, C E12-F050 A, B E12-F053 A, B E12-F308 E12-F394	RHR
E51-F063 E51-F064 E51-F065 E51-F076 E51-F013	RCIC

TABLE 3.4.3.2-2

REACTOR COOLANT SYSTEM INTERFACE VALVES PRESSURE MONITORS - ALARM

<u>VALVE NUMBER</u>	<u>SYSTEM</u>	<u>ALARM SETPOINT (psig)</u>
E21-F005 to E21-F006	LPCS	≤50
E12-F008 to E12-F006A	RHR	≤183
E12-F008 to E12-F006B	RHR	≤183
E12-F041A to E12-F042A	RHR	≤50
E12-F041B to E12-F042B	RHR	≤50
E12-F041C to E12-F042C	RHR	≤50

TABLE 3.4.3.2-3

REACTOR COOLANT SYSTEM INTERFACE VALVES  
PRESSURE INTERLOCKS

<u>VALVE NUMBER</u>	<u>SYSTEM</u>	<u>INTERLOCK SETPOINT (psig)</u>
E12-F052 to E51-F064	RCIC	≤ 465
E12-F041A to E12-F042A	RHR	≤ 50
E12-F041B to E12-F042B	RHR	≤ 50
E12-F041C to E12-F042C	RHR	≤ 50
E21-F005 to E21-F006	LPCS	≤ 50

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS

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4.6.4.1 Each isolation valve shown in Table 3.6.4-1 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by cycling the valve through at least one complete cycle of full travel and verifying the specified isolation time.

4.6.4.2 Each automatic isolation valve shown in Table 3.6.4-1 shall be demonstrated OPERABLE during COLD SHUTDOWN or REFUELING at least once per 18 months by verifying that on an isolation test signal each automatic isolation valve actuates to its isolation position.

4.6.4.3 The isolation time of each power operated or automatic valve shown in Table 3.6.4-1 shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

4.6.4.4 [DELETED]

TABLE 3.6.4-1  
CONTAINMENT AND DRYWELL ISOLATION VALVES

SYSTEM AND VALVE NUMBER	PENETRATION NUMBER	VALVE GROUP <sup>(a)</sup>	MAXIMUM ISOLATION TIME (Seconds)	
1. <u>Automatic Isolation Valves</u> <sup>#</sup>				
a. <u>Containment</u>				
Main Steam Lines	B21-F028A	5(0)*	1	5
Main Steam Lines	B21-F022A	5(I)*	1	5
Main Steam Lines	B21-F067A-A	5(0)*	1	9
Main Steam Lines	B21-F028B	6(0)*	1	5
Main Steam Lines	B21-F022B	6(I)*	1	5
Main Steam Lines	B21-F067B-A	6(0)*	1	9
Main Steam Lines	B21-F028C	7(0)*	1	5
Main Steam Lines	B21-F022C	7(I)*	1	5
Main Steam Lines	B21-F067C-A	7(0)*	1	9
Main Steam Lines	B21-F028D	8(0)*	1	5
Main Steam Lines	B21-F022D	8(I)*	1	5
Main Steam Lines	B21-F067D-A	8(0)*	1	9
RHR Reactor Shutdown Cooling Suction	E12-F008-A	14(0)	3	40
RHR Reactor Shutdown Cooling Suction	E12-F009-B	14(I)	3	40
Steam Supply to RHR and RCIC Turbine	E51-F063-B	17(I)	4	20
Steam Supply to RHR and RCIC Turbine	E51-F064-A	17(0)	4	20
Steam Supply to RHR and RCIC Turbine	E51-F076-B	17(I)	4	20
RHR to Head Spray	E12-F023-A	18(0)	3	94
RHR to Head Spray	E12-F394-B	18(I)	3	35 <sup>##</sup>

(a) See Specification 3.3.2, Table 3.3.2-1, for isolation signal(s) that operates each valve group.

(b) Deleted

(c) Hydrostatically tested with water to 1.10 P<sub>a</sub>, 12.65 psig.

(d) Hydrostatically tested by pressurizing system to 1.10 P<sub>a</sub>, 12.65 psig.

(e) Hydrostatically tested during system functional tests. <sup>a</sup>

(f) Deleted

(g) Normally closed or locked closed manual valves may be opened on an intermittent basis under administrative control.

\*The provisions of Specification 4.0.4 are not applicable for entry into OPERATIONAL CONDITIONS 2 or 3 provided the surveillance is performed within 12 hours after reaching a reactor steam pressure of 600 psig and prior to entry into OPERATIONAL CONDITION 1.

#The "-A, -B, -C, -(A), -(B), -(C)" designators on the valve numbers indicate associated electrical divisions.

##Initial closure time. Final closure time to be determined during ASME Section XI testing. Any required change to this closure time shall be submitted to the Commission within 90 days of the second closure time test completion.

TABLE 3.6.4-1 (Continued)  
CONTAINMENT AND DRYWELL ISOLATION VALVES

<u>SYSTEM AND VALVE NUMBER</u>	<u>PENETRATION NUMBER</u>	<u>VALVE GROUP</u> <sup>(a)</sup>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>	
<u>Containment (Continued)</u>				
Main Steam Line Drains	B21-F019-A	19(0)	1	20
Main Steam Line Drains	B21-F016-B	19(I)		20
RHR Heat Exchanger "A" to CTMT SPR Sparger INL	E12-F028A-A	20(I)	5	90
RHR Heat Exchanger "A" to CTMT Pool	E12-F037A-A	20(I)	3	74
RHR Heat Exchanger "B" to CTMT SPR Sparger INL	E12-F028B-B	21(I)	5	90
RHR Heat Exchanger "B" to CTMT Pool	E12-F037B-B	21(I)	3	74
RHR "A" Test Line to Supp. Pool	E12-F024A-A	23(0) <sup>(d)</sup>	5	90
RHR "A" Test Line to Supp. Pool	E12-F011A-A	23(0) <sup>(d)</sup>	5	36
RHR "C" Test Line to Supp. Pool	E12-F021-B	24(0) <sup>(d)</sup>	5	144
HPCS Test Line	E22-F023-C	27(0) <sup>(d)</sup>	6B	75
RCIC Pump Suction	E51-F031-A	28(0) <sup>(d)</sup>	4	56
RCIC Turbine Exhaust	E51-F077-A	29(0) <sup>(c)</sup>	9	26
LPCS Test Line	E21-F012-A	32(0) <sup>(d)</sup>	5	144
Cont. Purge and Vent Air Supply	M41-F011-(A)	34(0)	7	4
Cont. Purge and Vent Air Supply	M41-F012-(B)	34(I)	7	4
Cont. Purge and Vent Air Exh.	M41-F034-(B)	35(I)	7	4
Cont. Purge and Vent Air Exh.	M41-F035-(A)	35(0)	7	4
Plant Service Water Return	P44-F070-B	36(I)	6A	33
Plant Service Water Return	P44-F069-A	36(0)	6A	33
Plant Service Water Supply	P44-F053-A	37(0)	6A	33
Chilled Water Supply	P71-F150-(A)	38(0)	6A	12

TABLE 3.6.4-1 (Continued)

CONTAINMENT AND DRYWELL ISOLATION VALVES

<u>SYSTEM AND VALVE NUMBER</u>		<u>PENETRATION NUMBER</u>
<u>Containment (Continued)</u>		
Ctmt. H <sub>2</sub> Analyzer Sample	E61-F596A-(A)	108A(O)
Ctmt. H <sub>2</sub> Analyzer Sample	E61-F596B-(B)	108A(I)
Ctmt. H <sub>2</sub> Analyzer Sample Ret.	E61-F598A-(A)	107B(O)
Ctmt. H <sub>2</sub> Analyzer Sample Ret.	E61-F598B-(B)	107B(I)
Drywell H <sub>2</sub> Analyzer Sample	E61-F595A-(A)	107D(O)
Drywell H <sub>2</sub> Analyzer Sample	E61-F595B-(B)	107D(I)
Drywell H <sub>2</sub> Analyzer Sample Ret.	E61-F597A-(A)	107E(O)
Drywell H <sub>2</sub> Analyzer Sample Ret.	E61-F597B-(B)	107E(I)
Drywell Fiss. Prod. Monitor Sample	D23-F592-A	109A(O)
Drywell Fiss. Prod. Monitor Sample	D23-F591-B	109A(I)
Drywell Fiss. Prod. Mon. Smpl. Ret.	D23-F594-A	109B(O)
Drywell Fiss. Prod. Mon. Smpl. Ret.	D23-F593-B	109B(I)
Ctmt. Press. Inst. (Post Acc. Smpl.)	M71-F594-B	109D(O)
Ctmt. Press. Inst. (Post Acc. Smpl.)	M71-F595-A	109D(I)
Suppr. Pool Level Inst.	E30-F593A-A	113(O) <sup>(c)</sup>
Suppr. Pool Level Inst.	E30-F592A-A	114(O)
Suppr. Pool Level Inst.	E30-F594A-A	115(O) <sup>(c)</sup>
Suppr. Pool Level Inst.	E30-F591A-A	116(O)
Suppr. Pool Level Inst.	E30-F593B-B	117(O) <sup>(c)</sup>
Suppr. Pool Level Inst.	E30-F592B-B	118(O)
Suppr. Pool Level Inst.	E30-F594B-B	119(O) <sup>(c)</sup>
Suppr. Pool Level Inst.	E30-F591B-B	120(O)

TABLE 3.6.4-1 (Continued)

CONTAINMENT AND DRYWELL ISOLATION VALVES

<u>SYSTEM AND VALVE NUMBER</u>		<u>PENETRATION NUMBER</u>
b. <u>Drywell</u>		
Cont. Cooling Water Inlet	P42-F114-B	329(O)
Cont. Cooling Water Outlet	P42-F116-A	330(I)
Cont. Cooling Water Outlet	P42-F117-B	330(O)
3. <u>Other Isolation Valves</u> (g)#		
a. <u>Containment</u>		
Fuel Transfer Tube	F11-E015	4(I)
Feedwater Inlet	B21-F010A	9(I)
Feedwater Inlet	B21-F032A	9(O)
Feedwater Inlet	B21-F010B	10(I)
Feedwater Inlet	B21-F032B	10(O)
RHR "A" Suction	E12-F017A	11(O) (d)
RHR "B" Suction	E12-F017B	12(O) (d)
RHR "C" Suction	E12-F017C	13(O) (d)
RHR Shutdown Cooling Suction	E12-F308	14(I)
RHR Heat Ex. "A" to LPCI	E12-F044A	20(I)
RHR Heat Ex. "A" to LPCI	E12-F025A	20(I)
RHR Heat Ex. "A" to LPCI	E12-F107A	20(I)
RHR Heat Ex. "B" to LPCI	E12-F025B	21(I)
RHR Heat Ex. "B" to LPCI	E12-F044B	21(I)
RHR Heat Ex. "B" to LPCI	E12-F107B	21(I)
RHR Heat Ex. "C" to LPCI	E12-F234	22(O)
RHR Pump "C" to LPCI	E12-F041C-B	22(I)
RHR Pump "A" Test Line to Suppr. Pool	E12-F259	23(O) (e)
RHR Pump "A" Test Line to Suppr. Pool	E12-F261	23(O) (e)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

c. 480 VAC Circuit Breakers (Continued)

Molded Case, Type NZM

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1542-10	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B006A-A)
52-1542-14	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F055-A)
52-1542-15	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F057-A)
52-1542-16	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F059-A)
52-1542-17	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F061-A)
52-1542-18	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F063-A)
52-1542-19	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F065-A)
52-1542-21	800	0.100	SLCS OPERATING HEATER (N1C41D002)
52-1542-22	24	0.100	DRWL PURGE COMP AUX OIL PUMP (Q1E61C001A-A)
52-1542-23	500	0.100	REFUELING PLATFORM ASSY (Q1F15E003-A)
52-1542-26	175	0.100	DRYWELL RECIRC FAN (N1M51C001-A)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

c. 480 VAC Circuit Breakers (Continued)

Molded Case, Type NZM

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1542-29	1200	0.100	STBY LIQ CONTROL SYS MIXING HEATER (Q1C41D003)
52-1611-10	12.5	0.100	MOV - DRYWELL COLL TK OUTLET ISOLATION (Q1G41F044-B)
52-1611-15	12.5	0.100	MOV - PSW CTMT STM TNL CLR ISOL (Q1P44F070-B)
52-1611-16	50	0.100	MOV-RHR RX HD SPR INBD ISOL (Q1E12F394-B)
52-1611-25	12.5	0.100	MOV - DRYWELL CLG WTR ISOL (Q1P42F117-B)
52-1611-31	12.5	0.100	MOV - DRYWELL CLG WTR INL ISOL (Q1P42F114-B)
52-1611-32	32	0.100	MOV - CTMT CLG WTR ISOLATION (Q1P42F068-B)
52-1611-42	12.5	0.100	MOV PSW STEAM TUNNEL CLR ISOL (Q1P44F074-B)
52-1611-43	12.5	0.100	MOV PSW STEAM TUNNEL CLR ISOL (Q1P44F077-B)
52-1611-44	38	0.100	MOV - SERVICE AIR DRYWELL ISOLATION (Q1P52F195-B)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

c. 480 VAC Circuit Breakers (Continued)

Molded Case, Type NZM

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1621-03	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F595B-B)
52-1621-04	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F597B-B)

TABLE 3.8.4.2-1

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>BYPASS DEVICE (CONTINUOUS) (ACCIDENT CONDITIONS) (NO)</u>	<u>SYSTEM(S) AFFECTED</u>
Q1E51F010	Continuous	RCIC System
Q1E51F013	Continuous	RCIC System
Q1E51F019	Continuous	RCIC System
Q1E51F022	Continuous	RCIC System
Q1E51F031	Continuous	RCIC System
Q1E51F045	Continuous	RCIC System
Q1E51F046	Continuous	RCIC System
Q1E51F059	Continuous	RCIC System
Q1E51F068	Continuous	RCIC System
RCIC Trip and Throttle Valve on Turbine Q1E51C002	Continuous	RCIC System
Q1B21F065A	No	Reactor Coolant System
Q1B21F065B	No	Reactor Coolant System
Q1B21F098A	No	Reactor Coolant System
Q1B21F098B	No	Reactor Coolant System
Q1B21F098C	No	Reactor Coolant System
Q1B21F098D	No	Reactor Coolant System
Q1B21F019	Continuous	Reactor Coolant System
Q1B21F067A	Continuous	Reactor Coolant System
Q1B21F067B	Continuous	Reactor Coolant System
Q1B21F067C	Continuous	Reactor Coolant System
Q1B21F067D	Continuous	Reactor Coolant System
Q1B21F016	Continuous	Reactor Coolant System
Q1B21F147A	Continuous	MSL Drain Post LOCA Leakage Control
Q1B21F147B	Continuous	MSL Drain Post LOCA Leakage Control
Q1B33F019	Continuous	Recirculation System
Q1B33F020	Continuous	Recirculation System
Q1B33F125	Continuous	Recirculation System
Q1B33F126	Continuous	Recirculation System
Q1B33F127	Continuous	Recirculation System
Q1B33F128	Continuous	Recirculation System
Q1D23F591	*	Drywell Monitoring System
Q1D23F592	*	Drywell Monitoring System
Q1D23F593	*	Drywell Monitoring System
Q1D23F594	*	Drywell Monitoring System
Q1E12F040	Continuous	RHR System
Q1E12F023	Continuous	RHR System
Q1E12F006A	Continuous	RHR System
Q1E12F052A	Continuous	RHR System
Q1E12F008	Continuous	RHR System
Q1E12F394	Continuous	RHR System

TABLE 3.8.4.2-1 (Continued)

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>BYPASS DEVICE (CONTINUOUS) (ACCIDENT CONDITIONS) (NO)</u>	<u>SYSTEM(S) AFFECTED</u>
Q1E12F074A	Continuous	RHR System
Q1E12F026A	Continuous	RHR System
Q1E12F082A	No	RHR System
Q1E12F082B	No	RHR System
Q1E12F290A	Continuous	RHR System
Q1E12F047A	Continuous	RHR System
Q1E12F027A	Continuous	RHR System
Q1E12F073A	Continuous	RHR System
Q1E12F346	Continuous	RHR System
Q1E12F024A	Continuous	RHR System
Q1E12F087A	Continuous	RHR System
Q1E12F048A	Continuous	RHR System
Q1E12F042A	Continuous	RHR System
Q1E12F004A	Continuous	RHR System
Q1E12F003A	Continuous	RHR System
Q1E12F011A	Continuous	RHR System
Q1E12F053A	Continuous	RHR System
Q1E12F037A	Continuous	RHR System
Q1E12F028A	Continuous	RHR System
Q1E12F064A	Continuous	RHR System
Q1E12F290B	Continuous	RHR System
Q1E12F004C	Continuous	RHR System
Q1E12F021	Continuous	RHR System
Q1E12F064C	Continuous	RHR System
Q1E12F042C	Continuous	RHR System
Q1E12F048B	Continuous	RHR System
Q1E12F049	Continuous	RHR System
Q1E12F037B	Continuous	RHR System
Q1E12F053B	Continuous	RHR System
Q1E12F074B	Continuous	RHR System
Q1E12F042B	Continuous	RHR System
Q1E12F064B	Continuous	RHR System
Q1E12F096	Continuous	RHR System
Q1E12F094	Continuous	RHR System
Q1E12F006B	Continuous	RHR System
Q1E12F011B	Continuous	RHR System
Q1E12F052B	Continuous	RHR System
Q1E12F047B	Continuous	RHR System
Q1E12F027B	Continuous	RHR System
Q1E12F004B	Continuous	RHR System
Q1E12F087B	Continuous	RHR System
Q1E12F003B	Continuous	RHR System
Q1E12F026B	Continuous	RHR System
Q1E12F024B	Continuous	RHR System
Q1E12F028B	Continuous	RHR System
Q1E12F009	Continuous	RHR System
Q1E12F073B	Continuous	RHR System



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 7 TO FACILITY OPERATING LICENSE NPF-29

GRAND GULF NUCLEAR STATION, UNIT 1

MISSISSIPPI POWER & LIGHT COMPANY

MIDDLE SOUTH ENERGY, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

INTRODUCTION

By letter dated August 12, 1985, Mississippi Power & Light Company (the licensee) proposed to make three changes to the facility Technical Specifications: (1) change the names of two valves listed in Table 3.3.7.4-1 "Remote Shutdown Systems Controls" and four valves listed in Table 3.6.4-1, "Containment and Drywell Isolation Valves; (2) designate a different valve in the residual heat removal (RHR) to reactor head spray line as reactor coolant system pressure isolation valve (Table 3.4.3.2-1) and as containment isolation valve (Table 3.6.4-1) and make associated changes in the listing of primary containment penetration conductor overcurrent protective devices (Table 3.8.4.1-1), and motor-operated valve thermal overload protection (Table 3.8.4.2-1), and (3) add specifications in Table 3.3.3-1 "Emergency Core Cooling System (ECCS) Actuation Instrumentation" to incorporate interlock instrumentation which is designed to prevent overpressurization of low design pressure ECCS piping by the reactor coolant system, and make associated changes in other applicable Technical Specifications. This safety evaluation addresses changes (1) and (2) which are designated Item 12 in licensee's letter. Change (3) incorporation of interlock instrumentation for ECCS injection valves and designated Item 13 in licensee's letter, is not considered in this action.

EVALUATION

Change (1), changing the names of valves in Technical Specification Tables 3.3.7.4-1 and 3.6.4-1 to make the names consistent with plant nomenclature, is a purely administrative change and is therefore acceptable.

Change (2), designating a different valve (E 12 - F 394) in the RHR to reactor head spray line to serve the containment isolation function and the pressure isolation function, was proposed because the presently designated valve (E 51 - F 066) is not readily accessible for local leak rate testing.

The use of proposed valve (E 12 - F 394) for the pressure isolation function does not involve a change in the ASME Code piping classification. The proposed valve and piping to the valve is ASME Code Class 1, as required for reactor coolant system piping by 10 CFR 50.55a and will perform the pressure isolation function. Valve E 51 - F 066 would continue to be stroke tested and Valve E 12 - F 394

would be both stroke tested and local leak rate tested, thus meeting the requirements for testing pressure isolation valves in Standard Review Plan (SRP) Section 3.9.6. Accordingly, the staff concludes that the replacement of Valve E 51 - F 066 with Valve E 12 - F 394 in Technical Specification Table 3.4.3.2-1 "Reactor Coolant System Pressure Isolation Valves" is acceptable.

The replacement of Check Valve E 51 - F 066 with Motor Operated Valve E 12 - F 394 for the inboard containment isolation function requires that containment isolation signals be included in the design of Valve E 12 - F 394. These signals will be the same as those previously reviewed and accepted for the out board isolation valve. Valve E 12 - F 394 is upstream of Valve E 51 - F 066 and the valve in the line for the test connection (Valve E 12 - F 344). Since leakage through Valve E 12 - F 344 would be contained by the proposed containment isolation valve, Valve E 12 - F 344 as well as Valve E 51 - F 066, would be removed from Technical Specification Table 3.6.4-1 "Containment and Drywell Isolation Valves." The licensee proposes to include in the Technical Specifications a valve closure time of 35 seconds with a provision for revising the closing time should valve testing require it. The Technical Specifications would require the NRC staff to be notified of any change to the closing time. The staff concludes that Valve E 12 - F 394 will perform the inboard containment isolation function and that the changes proposed by the licensee to Technical Specification Table 3.6.4-1 "Containment and Drywell Isolation Valves" meet General Design Criterion 55 in 10 CFR 50, Appendix A, and SRP §6.2 and are, therefore, acceptable.

The designation of Motor-Operated Valve E 12 - F 394 as the pressure isolation valve and the containment isolation valve requires the associated electrical protective devices for motor operated Valve E 12 - F 394 to be added to Table 3.8.4.1-1 "Primary Containment Penetration Conductor Overcurrent Protective Devices" and Table 3.8.4.2-1 "Motor Operated Valves Thermal Overload Protection." The NRC staff has reviewed the proposed changes to these tables and concludes that they are in accordance with the Standard Technical Specifications and are therefore acceptable.

Licensee's letter dated August 12, 1985, stated that the proposed design of controls for Valve E 12 - F 394 would include a manual control switch on the remote shutdown panel in addition to the control room control circuits. Control room control circuits would be interlocked to prevent overpressurization of the RHR but the remote shutdown panel control circuit would not be interlocked. Since safety analyses for Grand Gulf Unit 1 do not require the valve to be operated from the remote shutdown panel, the licensee has not proposed the addition of this valve to the listing in Technical Specification Table 3.3.7.4-1, "Remote Shutdown System Controls." The NRC staff agrees that the remote control for Valve E 12 - F 394 need not be added to Table 3.3.7.4-1. However, as provided in SRP §7.4.III, if a control for the valve is included on the remote shutdown panel then an interlock, or acceptable alternative must be included in the remote shutdown panel control circuit to prevent inadvertent overpressurization of the RHR system. By letter dated October 30, 1985, licensee proposed to remove the manual control switch for Valve E 12 - F 394 from the remote shutdown panel. The NRC staff concludes that the licensee's proposal to remove the

control switch for Valve E 12 - F 394 from the remote shutdown panel is an acceptable means to prevent overpressurization of the RHR piping through inadvertent operation of this valve. The valve is not required to be operated from the remote shutdown panel because the valve need not be operated for safe shutdown in the event of any control room evacuation.

#### ENVIRONMENTAL CONSIDERATION

The amendment involves a change of requirements of facility components located within the restricted area as defined in 10 CFR 20. The Commission made a proposed determination that the amendment involves no significant hazards consideration, and there have been no comments on that proposal. Based on its evaluation, the staff concludes that there is no significant change in types or significant increase in the amounts of any effluents that may be released offsite. There is no significant increase in individual or cumulative occupational radiation exposure because the changes do not affect personnel exposure. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (50 FR 34994) on August 28, 1985, and consulted with the state of Mississippi. No public comments were received, and the state of Mississippi did not have any comments.

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

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