

November 12, 1986

Docket No.: 50-416

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Mr. Oliver D. Kingsley, Jr.
Vice President, Nuclear Operations
Mississippi Power & Light Company
Post Office Box 23054
Jackson, Mississippi 39205

Dear Mr. Kingsley:

SUBJECT: CHANGES TO TECHNICAL SPECIFICATIONS REGARDING CONTAINMENT
ISOLATION VALVES FOR POST-ACCIDENT SAMPLING SYSTEM

RE: GRAND GULF NUCLEAR STATION, UNIT 1

The Commission has issued the enclosed Amendment No. 24 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 15, 1986.

This amendment changes the Technical Specifications by adding an inboard containment isolation valve and two test connection valves in the post-accident sampling system.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

~~Original signed by~~

Lester L. Kintner, Project Manager
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosures:

- Amendment No. 24 to License No. NPF-29
- Safety Evaluation

cc w/enclosures:
See next page

WJ
WButler
10/30/86

WJ
PD#4/PM
LKintner:lb
10/31/86

WJ
JHulman
11/3/86

WJ
OGC
Young
11/3/86

WJ
PD#4/D
WButler
11/7/86

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P PDR



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

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Vice President, Nuclear Operations
Mississippi Power & Light Company
Post Office Box 23054
Jackson, Mississippi 39205

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Sincerely,

A handwritten signature in cursive script that reads "L L Kintner".

Lester L. Kintner, Project Manager
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosures:

1. Amendment No. 24 to License No. NPF-29
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Oliver D. Kingsley, Jr.
Mississippi Power & Light Company

Grand Gulf Nuclear Station

cc:

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Port Gibson, Mississippi 39150

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GGNS General Manager
Mississippi Power & Light Company
Post Office Box 756
Port Gibson, Mississippi 39150



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. 24
License No. NPF-29

1. The Nuclear Regulatory Commission (the Commission) has found that
 - A. The application for amendment by Mississippi Power & Light Company, Middle South Energy, Inc., and South Mississippi Electric Power Association, (the licensees) dated September 15, 1986, 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. NPF-29 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 24, 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.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by

Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 12, 1986

PD#4/BA
WButler
10/20/86

LK
PD#4/PM
LKintner:1b
10/31/86

OGC
m. Young
11/13/86
was noted revision to SC check state & say def. issuance
PD#4/D
WButler
11/17/86
WB

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

FOR THE NUCLEAR REGULATORY COMMISSION



Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 12, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 24

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Overleaf pages provided to maintain document completeness.*

Remove

3/4 6-41
3/4 6-42

3/4 6-45
3/4 6-46

Insert

3/4 6-41
3/4 6-42*

3/4 6-45
3/4 6-46*

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> | | |
| RHR Pump "B" Test Line | E12-F335 | 67(0) ^(c) |
| RHR "B" Test Line To Suppr. Pool | E12-F290B-B | 67(0) ^(d) |
| Inst. Air to ADS | P53-F006 | 70(I) |
| LPCS Relief Valve | E21-F018 | 71A(0) ^(d) |
| Vent Header | | |
| RHR Pump "C" Relief Valve | E12-F025C | 71B(0) ^(d) |
| Vent Header | | |
| RHR "C" Relief Valve Vent Hdr. to Suppr. Pool & Post-Acc. Sample Return | E12-F406 | 71B(I) ^(c) |
| RHR Shutdown Vent Header | E12-F036 | 73(0) |
| RHR Shutdown Suction Relief Valve Disch. | E12-F005 | 76B(0) |
| RHR Heat Ex. "A" Relief Vent Header | E12-F055A | 77(0) ^(d) |
| RHR Heat Ex. "A" Relief Vent Header | E12-F103A | 77(0) ^(d) |
| RHR Heat Ex. "A" Relief Vent Header | E12-F104A | 77(0) ^(d) |
| SSW "A" Supply | P41-F169A | 89(I) ^(c) |
| SSW "B" Supply | P41-F169B | 92(I) ^(c) |
| Ctmt. Leak Rate Test Inst. | M61-F015 | 110A(I) |
| Ctmt. Leak Rate Test Inst. | M61-F014 | 110A(0) |
| Ctmt. Leak Rate Test Inst. | M61-F019 | 110C(I) |
| Ctmt. Leak Rate Test Inst. | M61-F018 | 110C(0) |
| Ctmt. Leak Rate Test Inst. | M61-F017 | 110F(I) |
| Ctmt. Leak Rate Test Inst. | M61-F016 | 110F(0) |
| <u>b. Drywell</u> | | |
| LPCI "A" | E12-F041A | 313(I) |
| LPCI "B" | E12-F041B | 314(I) |
| LPCI "B" | E12-F236 | 314(0) |
| CRD to Recirc. Pump A Seals | B33-F013A | 326(I) |

TABLE 3.6.4-1 (Continued)

CONTAINMENT AND DRYWELL ISOLATION VALVES

| <u>SYSTEM AND VALVE NUMBER</u> | | <u>PENETRATION NUMBER</u> |
|--------------------------------|------------------|---------------------------|
| <u>Drywell (Continued)</u> | | |
| CRD to Recirc. Pump A Seals | B33-F017A | 326(O) |
| Instrument Air | P53-F008 | 335(I) |
| Standby Liquid Control | C41-F007 | 328(I) |
| Standby Liquid Control | C41-F006 | 328(O) |
| Cont. Cooling Water Supply | P42-F115 | 329(I) |
| Drywell Chilled Water Supply | P72-F147 | 332(I) |
| Condensate Flush Conn. | B33-F204 | 333(I) |
| Condensate Flush Conn. | B33-F205 | 333(O) |
| Combustible Gas Control | E61-F002A | 339(O) |
| Combustible Gas Control | E61-F002B | 338(O) |
| Combustible Gas Control | E61-F004A | 340(O) |
| Combustible Gas Control | <u>E61-F004B</u> | 340(O) |
| Upper Containment Pool Drain | G41-F265 | 342(O) |
| CRD to Recirc. Pump B Seals | B33-F013B | 346(I) |
| CRD to Recirc. Pump B Seals | B33-F017B | 346(O) |
| Service Air | P52-F196 | 363(I) |
| Cont. Leak Rate Test Inst. | M61-F021 | 438A(I) |
| Cont. Leak Rate Sys. | M61-F020 | 438A(O) |
| <u>BLIND FLANGES</u> | | |
| Cont. Leak Rate Sys. | NA | 40(I)(O) |
| Cont. Leak Rate Sys. | NA | 82(I)(O) |
| Containment Leak Rate System | NA | 343(I)(O) |

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> | |
| RHR "B" Test Line T/C E12-F350 | 67(0)(c) |
| RHR "B" Test Line T/C E12-F312 | 67(0)(c) |
| RHR "B" Test Line T/C E12-F305 | 67(0)(c) |
| Refueling Water Transf. Pump Suction T/C P11-F425 | 69(0)(c) |
| Refueling Water Transf. Pump Suction T/C P11-F132 | 69(0)(c) |
| Inst. Air to ADS T/C P53-F043 | 70(0) |
| Post Acc. Sample Return and RHR "C" Relief Valve Vent Hdr. to Suppr. Pool T/C E12-F409 | 71B(I)(c) |
| Post Acc. Sample Return and RHR "C" Relief Valve Vent Hdr. to Suppr. Pool T/C E12-F408 | 71B(0)(c) |
| Cont. Leak Rate T/C M61-F010 | 82(I) |
| RWCU To Feedwater T/C G33-F055 | 83(0) |
| Suppr. Pool Cleanup T/C P60-F011 | 85(0) |
| Suppr. Pool Cleanup T/C P60-F034 | 85(0) |
| RWCU Pump Suction T/C G33-F002 | 87(0) |
| RWCU Pump Discharge T/C G33-F061 | 88(0) |
| SSW T/C P41-F163A | 89(0)(c) |
| SSW T/C P41-F163B | 92(0)(c) |
| <u>b. Drywell</u> | |
| LPCI "A" T/C E12-F056A | 313(0) |
| LPCI "B" T/C E12-F056B | 314(0) |
| Instrument Air T/C P53-F493 | 335(0) |
| SLCS T/C C41-F026 | 328(0) |
| Service Air T/C P52-F476 | 363(0) |
| RWCU T/C G33-F120 | 366(I) |
| Reactor Sample T/C B33-F021 | 465(0) |

CONTAINMENT SYSTEMS

3/4.6.5 DRYWELL VACUUM RELIEF

LIMITING CONDITION FOR OPERATION

3.6.5 Both drywell post-LOCA vacuum relief subsystems and both drywell purge vacuum relief subsystems shall be OPERABLE with associated vacuum breakers and isolation valves closed.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

- a. With one of the drywell post-LOCA vacuum relief subsystems and/or one of the drywell purge vacuum relief subsystems inoperable for opening but known to be closed, restore the inoperable subsystem(s) to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With two of the post-LOCA vacuum relief subsystems inoperable for opening but known to be closed, provided that both of the drywell purge vacuum relief subsystems are OPERABLE, restore the inoperable subsystems to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With two of the post-LOCA vacuum relief subsystems and one of the drywell purge vacuum relief subsystems inoperable for opening but known to be closed, restore one inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With one of the drywell isolation vacuum breakers open, restore the open vacuum breaker to the closed position within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- e. With the position indicator of an OPERABLE drywell vacuum breaker or associated isolation valve of the drywell vacuum relief subsystems inoperable, verify the vacuum breaker or isolation valve to be closed at least once per 24 hours by local indication. Otherwise be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.5 Each post-LOCA and purge system vacuum breaker and associated isolation valve shall be:

- a. Verified closed at least once per 7 days.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 24 TO FACILITY OPERATING LICENSE NO. NPF-29

MISSISSIPPI POWER & LIGHT COMPANY

MIDDLE SOUTH ENERGY, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

GRAND GULF NUCLEAR STATION, UNIT 1

DOCKET NO. 50-416

1.0 INTRODUCTION

By letter dated September 15, 1986, Mississippi Power & Light Company, (the licensee) requested an amendment to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1. The proposed amendment would change the Technical Specifications by adding an inboard containment isolation check valve and two test connection valves in the post-accident sampling system (PASS) return line to Table 3.6.4-1, "Containment and Drywell Isolation Valves." These changes will be implemented prior to startup from the present refueling outage. The present containment isolation provisions for this line are a remote manual isolation valve in series with a pipe reducer (equivalent to a 1/4 inch orifice) which the licensee concluded meets the intent of Regulatory Guide 1.11, "Instrument Lines Penetrating Reactor Containment."

2.0 EVALUATION

The NRC staff has reviewed the licensee's application and associated discussion and justification. The staff notes that the licensee had previously concluded that the present arrangement meets the intent of Regulatory Guide 1.11 because of the remote manual isolation valve in conjunction with the flow restriction provided by the 3/4 inch pipe to 3/8 inch tubing reducer. Regulatory Guide 1.11 provides an acceptable alternate basis for meeting the requirements of General Design Criterion 56 (GDC 56), "Primary Containment Isolation" in Appendix A to 10 CFR 50 for instrument lines connected to or penetrating primary reactor containment (See NUREG 0800, Standard Review Plan (SRP), Section 6.2.4 "Containment Isolation System"). The PASS is a system consisting of tubing, in-line instruments, valves and other components to obtain samples of reactor coolant after an accident. It should not be considered, however, as an instrument line which must be open to perform its function. The multi-function PASS is normally isolated and is to be used only periodically following an accident. Therefore, Regulatory Guide 1.11 is not applicable to the PASS as an acceptable alternate basis for meeting GDC 56. The staff concludes that the present system is not an acceptable alternate basis

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for meeting GDC 56. The staff notes that the plant is presently in a refueling outage during which primary containment isolation is not required and that the proposed additional isolation valves will be installed prior to startup from the outage.

The licensee proposes to install an inboard isolation check valve in the PASS return line which enters containment through penetration 71B. Containment isolation would then consist of two valves in series both of which are outside the containment - the new check valve and the present remote manual valve. The remote manual valve is normally closed and controlled remotely by a key locked handswitch in the control room. Since the two valves are tied into a residual heat removal (RHR) relief valve discharge line which penetrates containment and terminates in the suppression pool, an isolation valve located inside containment could block flow in this discharge line preventing the relief function. The proposed addition of an inboard isolation check valve outside containment in series with the existing locked closed remote manual valve provides double valve protection from containment leakage during primary containment isolation. Because placing an isolation valve inside containment for Penetration 71B is not practical, the proposed two valves outside containment are an acceptable alternate basis for meeting GDC 56 as identified in SRP Section 6.2.4, Paragraph II.6.d.

The licensee also proposes to add two test connection valves to penetration 71B to provide leak testing capability. These manual isolation valves will be closed, except during leakage testing, and they are, therefore, acceptable.

These modifications to the PASS require changes to Grand Gulf Unit 1 Technical Specifications Table 3.6.4-1, "Containment and Drywell Isolation Valves." The proposed additions to Table 3.6.4-1 of the three new valves will make them subject to the limiting conditions for operation and applicable surveillance requirements of Technical Specification 3/4.6.4. The proposed modifications are, therefore, acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes to requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (51 FR 36098) on October 8, 1986, and consulted with the state of Mississippi. No public comments were received, and the state of Mississippi did not have any comments.

The staff has 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 the issuance of this amendment will not be inimical to the common defense and the security nor to the health and safety of the public.

Principal Contributors:

F. Witt, Plant Systems Branch, DBL
L. Kintner, BWR Project Directorate No. 4, DBL

Dated: November 12, 1986