

APR 24 1986

Docket No. 50-416

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

Dear Mr. Kingsley:

SUBJECT: ISSUANCE OF AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE  
NPF-29 GRAND GULF NUCLEAR STATION, UNIT NO. 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 11 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 your letter dated February 17, 1986.

The amendment changes a Technical Specification to reduce the heat dissipation requirement for surveillance tests of the standby gas treatment system (SGTS) heaters. To demonstrate operability of the SGTS, the heaters would be required to dissipate  $48 \pm 5.0$  kilowatts instead of the presently required  $50 \pm 5.0$  kilowatts. The amendment is effective as of its date of issuance.

A copy of the related safety evaluation supporting Amendment No. 11 to Facility Operating License NPF-29 is enclosed.

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

Sincerely,

**Original Signed by**

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

Enclosures:

1. Amendment No. 11
2. Safety Evaluation

cc w/enclosures:  
See next page

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PD#4/LA *MB*  
MO'Brien  
04/14/86

*HK*  
PD#4/PM  
LKintner:lb  
04/10/86

*Walt*  
OELD *SECY*  
*State print to issuance*  
*M. Young* PD#4/D  
04/17/86 WButler  
04/14/86 *WB*

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P PDR

Amendment No. 11 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

**Original Signed by**

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

Enclosure:  
Technical Specifications Change

Date of Issuance: April 23, 1986

PD#4/LA  
MO'Brien  
04/14/86

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LKintner:1b  
04/10/86

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per issuance*  
OELD  
*WButler*  
04/17/86

PD#4/D  
WButler  
04/14/86

*LB*



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

APR 23 1986

Docket No. 50-416

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Vice President, Nuclear Operations  
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P.O. Box 23054  
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A copy of the related safety evaluation supporting Amendment No. 11 to Facility Operating License NPF-29 is enclosed.

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

Sincerely,

A handwritten signature in black ink, reading "Walter R. Butler", is positioned above the typed name.

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

Enclosures:

1. Amendment No. 11
2. Safety Evaluation

cc w/enclosures:  
See next page

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

Grand Gulf Nuclear Station

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State Health Officer  
State Board of Health  
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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. 11  
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 & Light Company acting for itself, Middle South Energy, Inc., and South Mississippi Electric Power Association (the licensees), dated February 17, 1986, 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 a page change 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:

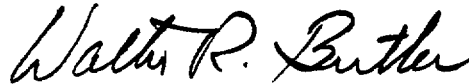
(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through

Amendment No. 11 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

A handwritten signature in cursive script, reading "Walter R. Butler".

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

Enclosure:  
Technical Specifications Change

Date of Issuance: April 23, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 11

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change.

Amended  
Page

3/4 6-56

Overleaf  
Page

3/4 6-55

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the subsystem by:
  - 1. Verifying that the subsystem satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4000 cfm  $\pm$  10%.
  - 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
  - 3. Verifying a subsystem flow rate of 4000 cfm  $\pm$  10% during system operation when tested in accordance with ANSI N510-1975.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.
- d. At least once per 18 months by:
  - 1. Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence for the:
    - a) LOCA, and
    - b) Fuel handling accident.
  - 2. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 9.2 inches Water Gauge while operating the filter train at a flow rate of 4000 cfm  $\pm$  10%.
  - 3. Verifying that the filter train and isolation dampers receive the appropriate actuation signal by each of the following test conditions. For at least one of these test conditions, verify that the filter train starts and isolation dampers open on receipt of the actuation signal.
    - a. Drywell pressure - high,
    - b. Reactor vessel water level - low low, level 2,
    - c. Fuel handling area ventilation exhaust radiation - high high,
    - d. Fuel handling area pool sweep exhaust radiation - high high, and
    - e. Manual initiation from the Control Room.
  - 4. Verifying that the fan can be manually started.
  - 5. Verifying that the heaters dissipate  $48 \pm 5.0$  kW when tested in accordance with ANSI N510-1975 (except for the phase balance criteria stated in Section 14.2.3).





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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 11 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

1.0 INTRODUCTION

By letter dated February 17, 1986, Mississippi Power & Light Company (the licensee) requested a change to the facility Technical Specifications to reduce the heat dissipation requirement for surveillance tests of the standby gas treatment system (SGTS) heaters. To demonstrate operability of the SGTS, the heaters would be required to dissipate  $48 \pm 5.0$  kilowatts instead of the presently required  $50 \pm 5.0$  kilowatts.

2.0 EVALUATION

The standby gas treatment system (SGTS) consists of redundant engineered safety feature filtration trains. Each train includes an electric heater to reduce the relative humidity of the incoming air to less than 70% before filtration under postulated design basis accident conditions in accordance with Regulatory Guide 1.52.\* Surveillance Requirement 4.6.6.3.d.5 of the Technical Specifications requires that the SGTS heaters be tested periodically to ensure they can dissipate  $50 \pm 5.0$  kilowatts (KW) when tested in accordance with ANSI N-510 (1975). The licensee states in its February 17, 1986 submittal that the test performed on the SGTS "B" train heater on February 15, 1986 showed a heat dissipation of less than 45.0 KW (44.926 KW). The licensee has requested that Surveillance Requirement 4.6.6.3.d.5 be revised to lower the heat dissipation requirement to  $48 \pm 5.0$  KW. The reason given by the licensee for the lower heat dissipation is that the presently installed heaters have a nominal rating of 48 KW instead of the 50 KW heaters which were installed when the Technical Specifications were issued with the operating license. The licensee has calculated that a minimum of about 21.5 KW is adequate to ensure 70% relative humidity in the air leaving the heaters.

The NRC staff has reviewed the licensee's submittal and made an independent calculation of the heat dissipation required to meet guidelines in Regulatory Guide 1.52. The staff's independent calculation confirms the licensee's calculated value of 21.5 KW assuming inlet air temperature of 140°F and relative humidity

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\*Regulatory Guide 1.52, "Design Testing and Maintenance Criteria for Post Accident Engineered Safety Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light Water Cooled Nuclear Power Plants", USNRC

of 100%, and assuming the SGTS design air flow rate of 4000 cubic feet per minute. The staff concludes that the requested change will not significantly alter the air quality leaving the heaters and the change meets the guidelines of Regulatory Guide 1.52. Therefore, the staff finds the licensee's proposed change to be acceptable.

### 3.0 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.

### 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 8054) on March 7, 1986, 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.

Principal Contributors: J. Lee, Plant Systems Branch, DBL  
L. Kintner, BWR Project Directorate No. 4, DBL

Dated: April 23, 1986

Amendment No. 11 to Facility Operating License No. NPF-29-Grand Gulf, Unit 1

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