

March 23, 1992

DOCKET # 125

Docket No. 50-416

Mr. William T. Cottle
Vice President, Operations GGNS
Entergy Operations, Inc.
Post Office Box 756
Port Gibson, Mississippi 39150

Dear Mr. Cottle:

SUBJECT: ISSUANCE OF AMENDMENT NO. 94 TO FACILITY OPERATING LICENSE
NO. NPF-29 - GRAND GULF NUCLEAR STATION, UNIT 1 (TAC NO. M79849)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 94 to Facility Operating License No. NPF-29 for the Grand Gulf Nuclear Station, Unit 1. This amendment revises the Technical Specifications (TS) in response to your application dated February 27, 1991.

The amendment would replace current License Condition 2.C(36), Attachment 1, Item (c)(4), which requires implementation of the requirements of Regulatory Guide 1.97 for flux monitoring prior to startup following the fifth refueling outage. The proposed new license condition would allow implementation of the Regulatory Guide 1.97 flux monitoring to be deferred until after the NRC staff completes its review of the BWR Owners' Group appeal of the NRC staff's Regulatory Guide 1.97 requirements.

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

Sincerely,

Original signed by:

Paul W. O'Connor, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 94 to NPF-29
2. Safety Evaluation

cc w/enclosures:
See next page

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| P. O'Connor(2) | OGC | D. Hagan(MS3206) | T. Gody, Jr.(MS13E21) |
| G. Hill(4) | Wanda Jones(MS7103) | C. Grimes(MS11E22) | D. Pickett (MS13H15) |
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| NAME | PNoonan | MSykes:pk <i>MS</i> | PO'Connor | <i>U</i> | JLarkins <i>for</i> |
| DATE | 2/5/92 | 2/5/92 | 2/5/92 | 2/11/92 | 2/23/92 |

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Subject to (1) Publication of Notice (2) Consideration of comments (3) 30 day waiting period (4) Not for state official.



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

March 23, 1992

Docket No. 50-416

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Sincerely,

A handwritten signature in cursive script that reads "Paul W. O'Connor".

Paul W. O'Connor, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 94 to NPF-29
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. W. T. Cottle
Grand Gulf Nuclear Station

Entergy Operations, Inc.

cc:

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

ENTERGY OPERATIONS, INC.

SYSTEM ENERGY RESOURCES, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

MISSISSIPPI POWER AND LIGHT COMPANY

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 94
License No. NPF-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (the licensee) dated February 27, 1991, 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 License, as indicated in the attachment to this license amendment; and License Condition 2.C(36), Attachment 1, Item (c)(4) of Facility Operating License No. NPF-29 is hereby amended to read as follows:

- (4) Implement the requirements of R.G. 1.97 for
flux monitoring consistent with the resolution
of the BWR Owners' Group (BWROG) appeal of the
NRC Staff's January 29, 1990, Safety Evaluation
Report on BWROG Licensing Topical Report
NEDO-31558. The Entergy Operations, Inc.
actions and schedules for implementing these
requirements shall be submitted to the NRC Staff
for approval within 60 days of the resolution of
the BWROG appeal by the Director of NRR.

--

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

FOR THE NUCLEAR REGULATORY COMMISSION


for John T. Larkins, Director
Project Directorate IV-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License

Date of Issuance: March 23, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 94

FACILITY OPERATING LICENSE NO. NPF-29

DOCKET NO. 50-416

Replace the following page of the License with the attached page. The revised page is identified by amendment number and contains a vertical line indicating the area of change.

REMOVE PAGE

18

INSERT PAGE

18

EOI shall complete the following requirements on the schedule noted below:

Emergency Response Facilities (Generic Letter 82-33, NUREG-0737
Supplement 1, SSER #5

EOI shall implement the specific items below, in the manner described in MP&L letter (AECM-83/0232) dated April 15, 1983, as modified in MP&L letter (AECM-83/0486) dated August 22, 1983, no later than the following specified dates:

(a) Safety Parameter Display System (SPDS)

- | | |
|---|--|
| (1) Submit a safety analysis and implementation plan to the NRC | July 1985 |
| (2) SPDS fully operational and operator trained | Prior to startup following first refueling outage. |

(b) Detailed Control Room Design Review (DCRDR)

- | | |
|---|---------------|
| (1) Submit a program plan to the NRC | December 1984 |
| (2) Submit a summary report to the NRC including a proposed schedule for implementation | July 1986 |

(c) Regulatory Guide 1.97 - Application to Emergency Response Facilities

- | | |
|---|---|
| (1) Submit a report to the NRC describing how the requirements of Supplement 1 to NUREG-0737 have been or will be met. | February 1985 |
| (2) Implement (installation or upgrade) requirements of R.G. 1.97 with exception of flux monitoring and coolant level monitoring. | Prior to startup following first refueling outage. |
| (3) Implement (installation or upgrade) requirements of R.G. 1.97 for coolant level monitoring. | Prior to startup following second refueling outage. |
| (4) Implement the requirements of R.G. 1.97 for flux monitoring consistent with the resolution of the BWR Owners' Group (BWROG) appeal of the NRC Staff's January 29, 1990, Safety Evaluation Report on BWROG Licensing Topical Report NEDO-31558. The Entergy Operations, Inc. actions and schedules for implementing these requirements shall be submitted to the NRC Staff for approval within 60 days of the resolution of the BWROG appeal by the Director of NRR. | -- |

(d) Upgrade Emergency Operating Procedures (EOP's)

- | | |
|--|------------|
| (1) Submit a Procedures Generation Package to the NRC. | April 1985 |
|--|------------|



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 94 TO FACILITY OPERATING LICENSE NO. NPF-29
ENTERGY OPERATIONS, INC., ET AL.
GRAND GULF NUCLEAR STATION, UNIT 1
DOCKET NO. 50-416

1.0 INTRODUCTION

By letter dated February 27, 1991, the licensee (Entergy Operations, Inc.), submitted a request for changes to the Grand Gulf Nuclear Station, Unit 1 License. The requested changes would replace current License Condition 2.C(36), Attachment 1, Item (c)(4), which requires implementation of the requirements of Regulatory Guide (RG) 1.97 for flux monitoring prior to startup following the fifth refueling outage. The proposed new license condition would allow implementation of the RG 1.97 flux monitoring to be deferred until after the NRC staff has finished reviewing the BWR Owners' Group (BWROG) appeal of the RG 1.97 requirements.

2.0 EVALUATION

The post-accident neutron monitoring system is intended to warn that the reactor is returning to a critical state. Under anticipated design basis events, a return to a critical state would not be expected once all the rods have been inserted. However, in certain hypothetical situations, rods could drift out or fuel could undergo physical changes. In these cases, the proposed system would provide 8 decades (10E-6% to 100% power) of power status information, allowing the approach to criticality to be detected over a greater operating range. The earlier warning would give the operators more time to initiate mitigative actions.

The current margin of safety is established by the existing operating neutron monitoring system and the shutdown margin of the control rod system. The post-accident monitoring system required by RG 1.97 provides additional information for the operator to respond to undefined post-accident reactivity anomalies. Until the post-accident qualified neutron flux monitoring system is installed and operational, the licensee will continue to use the presently installed neutron flux monitoring system and other post-accident qualified instrumentation. The presently installed system is expected to indicate subcritical reactor power during the initial phase of an accident (including a LOCA). Long-term monitoring is available through the the APRM channels where

operator action is required at the APRM down scale alarm. However, because of Category 1 requirements, long-term direct monitoring in a harsh environment may not be available over the entire RG 1.97 range. In that event, other provisional measures and indications are available to the operator:

- (a) The present control rod position indication system provides the reactor operator with the information that all rods are inserted.
- (b) Qualified instrumentation, such as for reactor pressure, suppression pool temperature, and safety relief valve actuation, provides the reactor operator with post-accident information to assess reactor power if direct neutron monitoring capability is not available.
- (c) The Emergency Procedures (EP) are symptom-based and provide appropriately conservative actions if reactor power cannot be directly measured in a post-accident situation. The EP contain action steps that mitigate the symptomatic effects of design basis events (such as LOCA) and events beyond design basis events (such as ATWS).

These compensatory measures ensure that the consequences of an accident previously evaluated will not be significantly increased by the absence of a post-accident neutron flux monitoring system while the NRC staff completes its review of the BWROG appeal of RG 1.97 requirements.

Based on the above evaluation, the staff concludes that the existing neutron flux monitoring instrumentation is acceptable for interim use. The staff expects the licensee to comply with the resolution of the BWROG appeal.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Mississippi State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 6037). Accordingly, the 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 the amendment.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: M. Sykes
P. O'Connor

Date: March 23, 1992