

November 19, 2002

Mr. William A. Eaton  
Vice President, Operations GGNS  
Entergy Operations, Inc.  
P. O. Box 756  
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION, UNIT 1 RE: EMERGENCY PLAN  
CHANGE - EMERGENCY ACTION LEVELS (TAC NO. MB4707)

Dear Mr. Eaton:

In your application dated February 28, 2002, you proposed changes to Table 4-1, "Emergency Action Levels" for Grand Gulf Nuclear Station, Unit 1 for the U. S. Nuclear Regulatory Commission (NRC) staff review and approval prior to implementation.

Based on the information provided in the application, as discussed in the enclosed Safety Evaluation, we have found that the proposed changes to Table 4-1 are acceptable in that the changes are acceptable alternatives to the guidance provided in NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," (NUREG-0654). The proposed changes conclude that the revised Emergency Action Levels meet the requirements of Section 50.47(b)(4) "Emergency plans," to Title 10 of the *Code of Federal Regulations* (10 CFR), and 10 CFR Part 50, "Domestic Licensing Of Production And Utilization Facilities," Appendix E, "Emergency Planning And Preparedness For Production And Utilization Facilities." You are requested to inform the NRC staff by letter when these changes are implemented.

Sincerely,

*/RA/*

David H. Jaffe, Sr. Project Manager, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No.: 50-416

Enclosure: Safety Evaluation

cc: See next page

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RidsNrrDipmlehb (TQuay) RMoody

\*SE Input Memo Dated 10/10/2002

ADAMS ACCESSION NUMBER: ML

NRR-039

OFFICE	PDIV-1/PM	PDIV-1/LA	DIPM/IEHB-SC	PDIV-1/SC
NAME	DJaffe:sab	DJohnson	KGibson*	RGramm
DATE	11/19/2002	11/19/2002		11/19/2002

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
ON THE PROPOSED CHANGES TO THE EMERGENCY ACTION LEVELS FOR  
ENTERGY OPERATIONS, INC., ET.AL  
GRAND GULF NUCLEAR STATION,  
DOCKET NO. 50-416

1.0 INTRODUCTION

By letter dated February 28, 2002, Entergy Operations, Inc. (the licensee) submitted proposed changes to the Grand Gulf Nuclear Station, Unit 1 (GGNS) Emergency Action Levels (EALs) (Reference 6.1) for the U.S. Nuclear Regulatory Commission (NRC) staff review and approval. As required by Part 50 "Domestic Licensing Of Production And Utilization Facilities," Appendix E, "Emergency Planning And Preparedness For Production And Utilization Facilities," Section IV "Content Of Emergency Plans," Subpart B "Assessment Actions," to Title 10 of the *Code of Federal Regulations* (10 CFR), EALs shall be discussed and agreed to by the applicant and State and Local governmental authorities and approved by NRC. This evaluation describes the NRC staff's basis for accepting the proposed EAL Emergency Plan changes.

2.0 REGULATORY EVALUATION

The NRC staff finds that the licensee in Attachment 2 of Reference 6.1 identified the applicable regulatory requirements. The regulatory requirements which the NRC staff applied in its review of the application included: 10 CFR 50.47(b)(4), 10 CFR Part 50, Appendix E, Section IV.B, and C, and regulatory guidance provided in Regulatory Guide 1.101, Revision 2, "Emergency Planning and Preparedness for Nuclear Power Reactors," (Reference 6.2) and NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", Sections II.D.1 and II.D.2 (Reference 6.3)

3.0 TECHNICAL EVALUATION

3.1 EAL 16.1 - Alert

3.1.1 Proposed Text:

"Emergency Director determines that plant conditions exist that warrant precautionary activation of the TSC [Technical Support Center] or EOF [ Emergency Operations Facility ] ."

### 3.1.2 Licensee's Justification:

The licensee stated in Reference 6.1 that:

With the Emergency Plan augmentation changes approved by the NRC in a letter dated September 29, 2000 (GNRI-2000/00093) [Reference 6.4], GGNS committed to activating the EOF at the Alert or higher emergency classification instead of a Site Area Emergency [SAE] or higher classification. Therefore, GGNS cannot place the EOF on standby if this EAL is used to classify the event. As a result of the augmentation change, an Alert classification under any other EAL would result in both the TSC and EOF being activated. Certain situations could however require a discretionary activation of either the TSC or the EOF but not both depending upon the nature of the event or the decision of the Emergency Director. The current wording implies that you would have to activate TSC and place personnel on standby to meet the conditions of the current EAL. This change only requires one action to be met (activation of the TSC or EOF) to declare an ALERT, thus it is more restrictive with the end result being that all facilities are activated based on the ALERT classification.

### 3.1.3 NRC Staff Evaluation:

The current EAL reads: "Emergency Director determines that plant conditions exist that warrant precautionary activation of the TSC and placing the EOF and key plant personnel on standby." This EAL cannot be implemented due to changes in on-shift augmentation staffing approved by the NRC. The proposed change brings more resources to respond to an event and potentially brings them earlier. Since the proposed EAL change is considered a more conservative alternative to the current EAL and meets the intent of the declaration of an Alert, it is therefore acceptable.

## 3.2 EAL - 14.1 - Site Area Emergency

### 3.2.1 Proposed Text:

"Emergency Director/Offsite Emergency Coordinator determines that a release is in progress or imminent that could affect the near site public."

### 3.2.2 Licensee's Justification:

The licensee stated in Reference 6.1 that:

With the Emergency Plan augmentation changes approved by the NRC in a letter dated September 29, 2000 (GNRI-2000/00093) (Reference 6.4), GGNS committed to activating the EOF at the Alert or higher emergency classification instead of a SAE or higher classification. If the event has progressed as expected, the EOF would have already been manned at the Alert Classification prior to reaching this SAE EAL. If the event initiates a SAE classification, activation of the EOF is still appropriate. Therefore, it is necessary to change our EAL to the proposed EAL to capture the reason for staffing the EOF as described in the definition of SAE in NUREG-0654. The proposed EAL encompasses events that would follow expected progression as well as events that initiate at a SAE, and therefore, does not reduce the effectiveness of the Plan. The proposed wording gives the actual plant condition that could require monitoring teams to

be dispatched. This wording would result in a SAE declaration, and thus require notification of offsite agencies. The offsite agencies, who have the responsibility and authority for near site and general public notification, would determine the need for public notification and actions.

### 3.2.3 NRC Staff Evaluation:

The current EAL reads: "Emergency Director determines that plant conditions exist that warrant: a. The activation of the EOF or b. A precautionary notification to the public near the site." This EAL cannot be implemented due to changes in on-shift augmentation staffing approved by the NRC. One of the purposes of declaring a SAE is to assure that field monitoring teams are dispatched. The proposed EAL will prompt the dispatch of the licensee's field teams. Also, the proposed EAL meets the intent of the definition of SAE in NUREG-0654 which states in part, "Any releases are not expected to exceed EPA Protective Action Guideline exposure levels except near the site boundary." Also, GGNS Emergency Plan Procedure 10-S-01-1, Attachment I, Revision 109, "Emergency Classifications" Section 18 has provisions for event classification based upon Emergency Director discretion. It is understood that the licensee will revise this section of their procedure to reflect the proposed wording approved by the NRC staff in this Safety Evaluation. Therefore, this EAL change is acceptable since there is no reduction in effectiveness of the classification scheme and the proposed EAL meets the intent of the declaration of a SAE.

## 4.0 AGREEMENT BY STATE AND LOCAL GOVERNMENTS

The regulations in 10 CFR Part 50, Appendix E, Section IV. B require, in part, that EALs are to be discussed and agreed upon by State and Local government authorities. The licensee stated in Reference 6.1 that these proposed changes were discussed with State and Local governments and that these authorities agreed to these proposed changes. Based on the above, the NRC staff finds that the licensee has satisfactorily met the requirements regarding obtaining the State and Local government concurrence for the changes to the EALs.

## 5.0 CONCLUSION

The NRC staff concludes that the licensee's emergency plan changes as proposed in Reference 6.1, are acceptable alternatives to the guidance provided in Reference 6.3. The NRC staff also concludes that the proposed revised EAL changes meet the requirements of 10 CFR 50.47(b)(4) and Appendix E to 10 CFR Part 50. Therefore, based on the information provided in Reference 6.1, the proposed EAL changes are acceptable.

## 6.0 REFERENCES

- 6.1 GNRO-2002/00014, Charles A. Bottemiller (Entergy) letter to NRC, "Proposed Emergency Plan Changes - Emergency Action Levels (EALS)-LDC 2001-191," dated February 28, 2002
- 6.2 Regulatory Guide 1.101, Revision 2, "Emergency Planning and Preparedness for Nuclear Power Reactors,"

- 6.3 NUREG-O654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."
- 6.4 NRC Letter, GNRI-2000/00093, S. Patrick Sekerak, "Grand Gulf Nuclear Station, Unit 1, Proposed Emergency Plan Table 5-1 Changes (TAC NO. MA1130)," dated September 29, 2000.

Principal Contributor: Robert E. Moody

Date: November 19, 2002

Grand Gulf Nuclear Station

cc:

Executive Vice President  
& Chief Operating Officer  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286-1995

Wise, Carter, Child & Caraway  
P. O. Box 651  
Jackson, MS 39205

Winston & Strawn  
1400 L Street, N.W. - 12th Floor  
Washington, DC 20005-3502

Director  
Division of Solid Waste Management  
Mississippi Department of Natural  
Resources  
P. O. Box 10385  
Jackson, MS 39209

President  
Claiborne County  
Board of Supervisors  
P. O. Box 339  
Port Gibson, MS 39150

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

Senior Resident Inspector  
U. S. Nuclear Regulatory Commission  
P. O. Box 399  
Port Gibson, MS 39150

General Manager, GGNS  
Entergy Operations, Inc.  
P. O. Box 756  
Port Gibson, MS 39150

Attorney General  
Department of Justice  
State of Louisiana  
P. O. Box 94005  
Baton Rouge, LA 70804-9005

State Health Officer  
State Board of Health  
P. O. Box 1700  
Jackson, MS 39205

Office of the Governor  
State of Mississippi  
Jackson, MS 39201

Attorney General  
Asst. Attorney General  
State of Mississippi  
P. O. Box 22947  
Jackson, MS 39225

Vice President, Operations Support  
Entergy Operations, Inc.  
P.O. Box 31995  
Jackson, MS 39286-1995

Director  
Nuclear Safety Assurance  
Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150