



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 15, 1999

*File Center*

*50-416*

LICENSEE: Entergy Operations, Inc.  
FACILITY: Grand Gulf Nuclear Station, Unit 1  
SUBJECT: SUMMARY OF NOVEMBER 2, 1999, MEETING TO DISCUSS  
LICENSEE'S EMERGENCY PREPAREDNESS PLAN CHANGE  
(TAC NO. MA1130)

A meeting was conducted on Tuesday, November 2, 1999, between the Nuclear Regulatory Commission (NRC) staff and the licensee for the Grand Gulf Nuclear Station (GGNS), Unit 1. The meeting was held at the site, at the request of the staff, to discuss the licensee's emergency preparedness (EP) plan change that was submitted by letter dated March 6, 1998. The notice for the meeting was issued on October 20, 1999.

Enclosure 1 is the list of attendees and Enclosure 2 is the handout from the staff providing the criteria for extending the augmentation/activation times for the technical support center (TSC) and emergency offsite facility (EOF). Augmentation time is the time for the licensee to augment the EP staff and activation time is the time to have the emergency response center operational. The handout had previously been sent to the licensee in preparation for the meeting.

In its letter of March 6, 1998, the licensee requested two major changes to its current EP plan: (1) extend the augmentation times of the on-shift staff, the TSC and EOF listed in Table 5-1, "Shift Staffing and Augmentation Capabilities," of the EP plan, and extend the activation time goals for the TSC and EOF; and (2) allow the emergency tasks involving health physicists, technical support, and core thermal hydraulics, also listed in Table 5-1 of the EP plan, to be performed by personnel assigned other duties. Subsequent to the staff's review of the licensee's request for changes to its EP plan, the licensee submitted supplemental letters dated January 20 and July 15, 1999, to address concerns raised by the staff in telephone conference calls of May 5, June 29, and September 2, 1999.

In the supplemental letter dated January 20, 1999, the licensee reduced the requested extension time from 120 minutes to 90 minutes for the capability to augment the on-shift staff and for the activation time goals for the TSC and EOF. The licensee also changed the basis for the extension requested from when licensee personnel were needed to when they can get to the emergency support centers from where they live offsite.

The agenda and objectives for the meeting were (1) to expedite staff review of the licensee's request; (2) to determine the condition of the access road immediately around the site, out to intrastate or interstate roads; (3) to obtain information from the State of Mississippi concerning what assistance is available to licensee personnel driving to the site; (4) to determine what additional information the licensee would need to submit to support extending the augmentation/activation times requested; and (5) to propose a methodology the NRC and the licensee could use to demonstrate that sharing emergency tasks will not reduce the effectiveness of the EP plan.

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Driving to the site from Vicksburg, Mississippi, the staff observed the straight, 4-lane Mississippi Route 61 which goes south from Interstate 20 to the curvy, two-lane local road which is about 8 miles from Route 61 to the site. From Clinton, Mississippi, the route is by the straight, two-lane Natchez Trace to a curvy, two-lane road which is about 18 miles to the site. The licensee stated that local centers where licensee personnel live away from the site are south of Vicksburg and Clinton. The curvy, two-lane local roads extend the driving time to the site.

A representative from the Mississippi Emergency Management Agency explained that the State could help licensee personnel arrive at the site during an emergency by Mississippi State highway patrol escort. However, in the short time period following an event where EP responders would be called in, the representative believed that it may not significantly reduce the responders' driving times.

In addressing the licensee's proposal to extend both the augmentation and activation times, the staff indicated that, during past reviews, the criteria in Enclosure 2 was used. In discussing Criterion a. and the reference to off-normal and normal working hours as to when the event occurs, the licensee stated that the distinction should not be made between off-normal and normal working hours, but whether the augmentation of the emergency response centers require licensee personnel from onsite or offsite. Even during normal working hours, there could be an individual needed to activate the emergency response center, but the individual is not onsite. The licensee stated that this should be a rare situation because they are committed to activate the center as soon as possible, and it is likely that an individual not onsite could be replaced by another person of the same or similar expertise that is onsite.

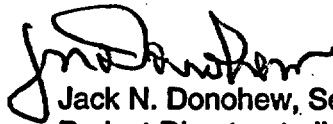
For Criterion b., the licensee indicated that, when GGNS was initially licensed, the majority of plant personnel and consequently, most emergency responders, resided in Port Gibson, Mississippi, approximately 8 miles from the site. However, over the years, personnel have relocated to major cities in Mississippi such as Vicksburg or Jackson which are 50 to 60 miles from the site. One of the major access routes to GGNS is from the south of Vicksburg over Route 61, a 4-lane road with speed limits of 55 and 60 miles per hour (mph). From Route 61, plant personnel must use a two-lane road for approximately 8 miles. This road is curvy and, during several months of the year, heavily populated with deer where drivers must slow down to avoid them. Another major access route, from Clinton, Mississippi, just east of Jackson to the site, is a straight, two-lane highway with speed limits of 55 to 60 mph and is called the Natchez Trace, exiting onto a curvy, two-lane highway 18 miles from the site.

The staff and the licensee discussed the criteria given in Enclosure 2 in terms of what information the licensee had not yet submitted to the staff for the proposed extension of the activation times. For example, Criterion f. relates to the population density surrounding the site and the licensee's three letters, noted in paragraph three that did not address the population density. However, the licensee had submitted population density data in a letter dated July 21, 1995, for Amendment No. 137 issued April 26, 1999. The licensee stated that it would reference the July 21, 1995, letter, and the population density data in a future letter that will provide the remainder of the information needed by the staff.

The staff and licensee discussed temporary approval of the proposal to share emergency tasks. This would allow the licensee to implement the concept of sharing certain emergency response tasks, to perform a task analysis and time motion study of the sharing of these tasks, and to conduct drills using scenarios developed collaboratively with the NRC to test the concept of

sharing certain emergency tasks. The results of the study and drills would be used by the licensee to support or negate the proposed changes in this area and by the NRC to determine if its guidance in this area should be modified. The study and drills would be agreed upon by both the staff and the licensee to ensure that they address the effectiveness of how the emergency tasks were being shared. The staff stated that it would discuss this concept with senior NRC management.

The staff and licensee completed their discussions and the meeting was closed.



Jack N. Donohew, Senior Project Manager, Section 2  
Project Directorate IV & Decommissioning  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures: 1. List of Meeting Attendees  
2. Staff's Handout

cc w/encls: See next page

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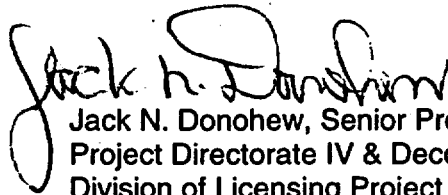
\* See previous concurrence

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cc:

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Vice President, Operations GGNS  
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Port Gibson, MS 39150**

**LIST OF ATTENDEES AT MEETING OF NOVEMBER 2, 1999**

**EMERGENCY PREPAREDNESS PLAN CHANGES**

<b><u>NAME</u></b>	<b><u>AFFILIATION</u></b>
J. Donohew	NRC/NRR/PDIV-2
P. Sekerak	NRC/NRR/PDIV-1
E. Fox	NRC/NRR/IOLB
J. Roberts	EOI - Grand Gulf
M. Gwynn	EOI - Grand Gulf
M. Larson	EOI - Grand Gulf
W. Shelly	EOI - Grand Gulf
R. Chapman	MEMA

NRC = Nuclear Regulatory Commission  
NRR = Office of Nuclear Reactor Regulation  
IOLB = Operator Licensing, Human Performance, and Plant Support Branch  
PDIV-x = Project Directorate IV, Section x  
EOI = Entergy Operations, Inc.  
MEMA = Mississippi Emergency Management Agency

October 14, 1999

**[AUGMENTATION/]\*ACTIVATION TIME EXTENSION CRITERIA**

- a. State that the augmentation time of the emergency response centers is being separated from the activation time. [Augmentation time is the time for the licensee to augment the emergency preparedness staff and activation time is the time to have the emergency response center operational.]\* Provide the off-normal and normal working hour activation goals to be placed in the emergency preparedness (EP) plan. The normal working hour activation goal would be shorter than the current activation time in the plan because of the plant staff available onsite during normal working hours. The augmentation time would be given in the augmentation table of the plan.
- b. State a longer activation time will allow a longer augmentation time which will allow a larger base of emergency response personnel for the plant and provide more assurance that the centers will be staffed by sufficient technical and senior-designated plant staff to provide the needed support by the augmentation time designated in the augmentation table in the plan. Provide the demography of workers living away from the site in terms of their driving times to the site. Include and discuss any measures that the local authorities may provide to help personnel drive to the site. Relate the driving times to the proposed augmentation time, and the size of the base of responders. Activation would be 15 minutes after the augmentation time.
- c. Provide the size of the operations staff onsite, and if it has been increased since the plant was licensed and by how much. These are the people that would be involved with the event until the TSC/EOF are activated. Explain how the control staff can handle the event until the emergency response centers are activated at the later time. The increased staff compared to that when the plant was licensed allow more staff to respond to an event.
- d. Provide the conditions which must be met for the emergency response centers to be considered activated. These conditions must be clear and unambiguous, and based on the personnel and activities necessary to be carried out by the facility in responding to an event. Put this in the EP plan if it is not there.
- e. Show that the control room can augment staff at any time or emergency classification level. This would be shown by deleting any footnotes in the augmentation table that indicate that the times for capability of additional emergency staff commence at the Alert or higher classification.
- f. Provide the population density of the public around plant to show it is a remote site with a low population density close to the site. State if the population density has decreased since the plant was licensed. Within 2 miles of the site is the area where prompt protective actions that need to be taken would be taken by the control room staff based on plant conditions before the emergency response center are activated and would have an input.

\* Added to the handout to explain augmentation versus activation.

Enclosure 2