



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 27, 1996

LICENSEE: ENTERGY OPERATIONS, INC. *JH*
FACILITY: Grand Gulf Nuclear Station, Unit 1
SUBJECT: SUMMARY OF AUGUST 29, 1996, MEETING TO DISCUSS THE POTENTIAL
APPLICATION OF THE NUREG-1465 SOURCE TERMS TO CONTAINMENT
ISOLATION VALVE CLOSURE TIMES FOR GRAND GULF NUCLEAR STATION

A meeting was held on Thursday, August 29, 1996, for the Nuclear Regulatory Commission (NRC) staff and the licensee to discuss the potential application of the revised source terms in NUREG-1465, "Accident Source Terms for Light-Water Nuclear Power Plants," dated February 1995, to the closure times of containment isolation valves at Grand Gulf Nuclear Station, Unit 1 (GGNS). The meeting was held at the GGNS site near Port Gibson in Claiborne County, Mississippi, at the request of the licensee. A notice of this meeting was issued on July 26 and August 15, 1996. The second notice was issued to reschedule the meeting from August 14 and 15, 1996, to August 29 and 30, 1996. Because the meeting went into the evening of August 29, 1996, it was completed on that day, and no meeting was held on August 30, 1996.

Attachment 1 is the list of attendees, Attachment 2 is information provided by the NRC staff at the meeting, and Attachment 3 is the handout from the licensee at the meeting.

BACKGROUND:

Since NUREG-1465 was issued by the staff in 1995, the staff has conducted meetings with the nuclear industry on the application of updated source terms for operating nuclear power plants. One of the meetings was held on January 23, 1996, and documented in the meeting summary issued February 1, 1996. In that meeting, the staff stated that the licensees should focus on limited-scope applications of the NUREG to operating plants until the staff has issued regulatory guidance on the application of NUREG-1465 to operating plants. A "timing-only" application of NUREG-1465 was identified by the staff as a potential limited-scope application.

MEETING SUMMARY:

The agenda for the meeting is the first page of Attachment 3.

The staff's memorandum to the Commission, dated August 9, 1996, on the use of NUREG-1465 source terms at operating reactors, was discussed. A copy of the memorandum is in Attachment 2. This memorandum, which is in the public record, discusses the staff's approach for seeking guidance from the Commission on activities involving the implementation of the revised accident source terms at operating reactor plants. The staff stated that a paper will be sent to the Commission with further details on this subject by November 1, 1996.

The staff further stated that NUREG-1465 is a staff document, which has been issued to the public without any guidance on its use for operating light-water nuclear power plants. The NUREG is not part of the regulations and, at this time, has not been included in any regulatory guidance to licensees. Regulatory guides for NUREG-1465 are scheduled to be developed in 1997.

The second and third pages of Attachment 3 are the initial application of NUREG-1465 source terms to GGNS by the licensee. As stated by the licensee, this would be "a simple change to the timing of the activity release [from the core to the containment] and containment isolation." The licensee also stated that release fractions, chemical form of the radioactivity, and other assumptions in the loss-of-coolant accident (LOCA) dose analysis for GGNS will not be changed from that in the Updated Final Safety Analysis report (UFSAR) for GGNS and, therefore, will not be taken from NUREG-1465.

The licensee presented the safety and cost benefits of the application of NUREG-1465 for containment isolation timing. It also provided a table of other applications of the NUREG-1465 source terms. This is from information which has also been provided to the staff during prior interactions with the nuclear industry.

Based on the January 23, 1996, meeting between the staff and the nuclear industry, the licensee stated that it believed an acceptable limited-scope application of NUREG-1465 was for containment isolation timing. The approach would be to use the timing of activity released from the core into containment in NUREG-1465 with the TID-14844 radioactivity source terms for the LOCA in Chapter 15 of the UFSAR for GGNS. The licensee suggested that this should be consistent with the statements made by the staff in the January 23, 1996, meeting.

The staff indicated that the regulatory impacts of moving from the current regulatory license framework for an operating plant, based on the TID-14844 source term, to a new regulatory license framework based on NUREG-1465 were still under development by the staff. However, the practice of adopting only the timing attributes of NUREG-1465 with all other assumptions based on the TID-14844 framework may not be consistent with the objective of a limited-scope application. The staff suggested that certain qualitative insights regarding timing may be amendable to a "timing-only" application, but that applications involving dose calculations (i.e., the quantitative insights) are likely to involve most of the insights from NUREG-1465 and might not be appropriate as a limited-scope application.

The licensee stated that it believed the calculational methods in the appendices of the Nuclear Energy Institute (NEI)/Electric Power Research Institute (EPRI) Generic Framework Document (the document was submitted by letter dated November 15, 1995, and discussed in the January 23, 1996, meeting) were acceptable to the staff. This was based on the lack of a negative response from the staff to NEI on these methods. The staff stated that NEI has been informed that the acceptability of the calculational

methods would be addressed in the context of the pilot plant reviews and, in several meetings with NEI and the pilot plant licensee's, meetings similar to this meeting, the staff has pointed out aspects of the methods which would be difficult reviews. Several plants, including GGNS, have been designated as pilot plants to work with the staff in the implementation of NUREG-1465 to the operating plants.

After this discussion, the meeting ended.

Docket No. 50-416

Attachments: 1. List of Meeting Attendees
2. NRC Staff's Handout
3. Licensee's Handout

cc w/atts: See next page

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J. Roe	E. Adensam	P. Tressler	W. Beckner
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J. Lee	B. Zalcman		

Document Name: GG082996.MTS

OFC	PM/PD4-1	PDST/DRPM	PERB/DRPM	SC/PERB
NAME	JDonohew/vw	BZalcman	JLee	REmch
DATE	9/19/96	9/20/96	9/20/96	9/20/96
COPY	(YES/NO	YES/NO	YES/NO	YES/NO

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COPY	YES/NO	YES/NO	YES/NO	YES/NO

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Entergy Operations, Inc.

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
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
Route 2, Box 399
Port Gibson, MS 39150

Nuclear Operating Plant Services
Bechtel Power Corporation
9801 Washington Boulevard
Gaithersburg, MD 20878

Vice President, Operations GGNS
Entergy Operations, Inc.
P. O. Box 756
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
and Regulatory Affairs
Entergy Operations, Inc.
P.O. Box 756
Port Gibson, MS 39150

ATTENDEES AT MEETING OF JUNE 26, 1996

ENCLOSURE BUILDING ISOLATION REQUIREMENTS DURING RFO 8

<u>NAME</u>	<u>AFFILIATION</u>
S. Mahoney	EOI - Grand Gulf
G. Broadbent	EOI - Grand Gulf
R. Deepak	EOI - Grand Gulf
M. Withrow	EOI - Grand Gulf
R. Fuller	EOI - Grand Gulf
M. Morris	Omega Technical Services, Inc.
J. Donohew	NRC/NRR/PDIV-1
B. Zalcman	NRC/NRR/DRPM
J. Lee	NRC/NRR/PERB

where:
EOI = Entergy Operations, Inc.
NRC = Nuclear Regulatory Commission
NRR = Office of Nuclear Reactor Regulation