

May 24, 2000

MEMORANDUM FOR: Docket File

FROM: S. Patrick Sekerak, Project Manager, Section 1 */RA/*  
Project Directorate IV & Decommissioning  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation (NRR)

SUBJECT: GRAND GULF NUCLEAR STATION, UNIT 1 (GGNS);  
ELECTRONIC TRANSMISSION OF ITEMS FOR DISCUSSION  
IN A TELEPHONE CONFERENCE RE: GGNS REQUEST FOR  
IMPLEMENTATION OF TSTF-9 (TAC NO. MA6765)

The attached points for discussion were prepared by the NRR Division of Licensing Project Management, and electronically transmitted to Mr. Jerry Roberts of Entergy Operations, Inc. on May 10, 2000 in preparation for a telephone conference. The primary purpose of the teleconference is to discuss the methodology to be used by GGNS for calculation of shutdown margin (SDM). This issue is related to the GGNS request for implementation of generic changes, specifically TSTF-9, to the Improved Standard Technical Specifications.

This memorandum and the attachment do not convey a formal request for information or represent an NRC staff position. Formal questions, if considered necessary, will be sent to the licensee depending on the results of the discussion during the telephone conference.

Docket Nos. 50-416

May 24, 2000

MEMORANDUM FOR: Docket File

FROM: S. Patrick Sekerak, Project Manager, Section 1 */RA/*  
Project Directorate IV & Decommissioning  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation (NRR)

SUBJECT: GRAND GULF NUCLEAR STATION, UNIT 1 (GGNS);  
ELECTRONIC TRANSMISSION OF ITEMS FOR DISCUSSION  
IN A TELEPHONE CONFERENCE RE: GGNS REQUEST FOR  
IMPLEMENTATION OF TSTF-9 (TAC NO. MA6765)

The attached points for discussion were prepared by the NRR Division of Licensing Project Management, and electronically transmitted to Mr. Jerry Roberts of Entergy Operations, Inc. on May 10, 2000 in preparation for a telephone conference. The primary purpose of the teleconference is to discuss the methodology to be used by GGNS for calculation of shutdown margin (SDM). This issue is related to the GGNS request for implementation of generic changes, specifically TSTF-9, to the Improved Standard Technical Specifications.

This memorandum and the attachment do not convey a formal request for information or represent an NRC staff position. Formal questions, if considered necessary, will be sent to the licensee depending on the results of the discussion during the telephone conference.

Docket Nos. 50-416

DISTRIBUTION:  
PUBLIC  
PDIV-1 RF

Accession No: ML003718265

To receive a copy of this document, indicate "C" in the box			
OFFICE	PDIV-1/PM	PDIV-1/SC	
NAME	PSekerak:sp	RGramm	
DATE	5/24/00	5/25/00	

## CLARIFICATION OF TSTF-9 REQUEST

### IN LICENSEE'S APPLICATION DATED AUGUST 20, 1999

By phone, GGNS stated that the methodology for the shutdown margin was documented in NEDE-24011-P-A. The following are aspects of the NEDE document that need clarification before the staff completes its review of the application:

1. The staff needs to be walked through how the NEDE document would be used to determine the shutdown margin (SDM). Would you be following verbatim all the pertinent sections of the NEDE document?
2. What revision of the NEDE document would you be using for the SDM in the COLR? We have been told the latest revision is No. 13; however, we have only pages up to Revision 11.
3. In Section 3.2.4.1 of the NEDE document, there is a reference to 3.3 for the BWR simulator code to calculate the SDM. In Section 3.3, there are references to the GEMINI and GENESIS processes. Which process would be used to calculate the SDM?
4. Section 3.2.4.1 of the NEDE document refers to uncertainty in the SDM calculations and lists references 3-5 and 3-6. Reference 3-5 is NEDO-20946-A, "BWR Simulator Methods Verification," January 1977; and reference 3-6 is BWR/4,5,6, "Standard Safety Analysis Report," revision 2, Chapter 4, June 1977. Which document would be used for SDM uncertainties, and we need a copy of the pertinent pages for review?
5. The acceptance criteria for SDM in Item F of Section 1.2.3 of the NEDE document states that "the core must be capable for being made subcritical with margin ...." The NEDE document does not appear to provide this margin, and in the response to staff questions about Section 3.5.2, "Cold Shutdown Margin," states SDM is the responsibility of the plant operator. What is the margin that would be used with the SDM in the COLR?
6. What would be the effect of a mixed fuel core (i.e., the current mixed Siemen and GE fuel core) on referencing only the NEDE document in the COLR for the SDM?
7. In Section 3.2.1 of the NEDE document, there is a statement that "any differences between the reference loading pattern and the actual loading pattern are evaluated ...." Would this be followed for the SDM in the COLR?
8. In Section 3.4.2.9 of the NEDE document, it is stated that adequate SDM is verified during the startup. Is this done now and would it be done with the SDM in the COLR?