

September 11, 1995

MEMORANDUM TO: William D. Beckner, Director
Project Directorate IV-1
Division of Reactor Projects III/IV

FROM: José A. Calvo, Chief (Original signed by J. Calvo)
Electrical Engineering Branch
Division of Engineering

SUBJECT: RESPONSE TO THE FOLLOWUP TO THE REQUEST FOR
ADDITIONAL INFORMATION REGARDING GENERIC
LETTER 92-08 (TAC NO. M85554)

Plant: Grand Gulf Nuclear Station, Unit 1
Licensee: Entergy Operations, Inc.
Review Status: Open

We have reviewed Entergy Operations's responses of December 21, 1994, and March 29, 1995, to the requests for additional information (RAI) of September 23, 1994, and December 28, 1994, respectively, regarding Generic Letter 92-08, "Thermo-Lag 330-1 Fire Barriers." The licensee was required, pursuant to Section 182A of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f), to submit written reports, under oath of affirmation, that provided the information specified in the RAIs. On the basis of our review, we have determined that the licensee's responses to the RAIs are incomplete. The specific areas where we found the licensee's responses to be incomplete are discussed in the attachment. Please transmit this information to the licensee and request that it submit a revised response. We recommend that the licensee be given 45 days to submit its revised response.

Docket No.: 50-416
Attachment: As stated

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CONTACT: R. Jenkins, NRR/DE
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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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GRAND GULF NUCLEAR STATION, UNIT 1
DOCKET NO. 50-416
FOLLOWUP REQUEST FOR ADDITIONAL INFORMATION REGARDING
GENERIC LETTER 92-08
"THERMO-LAG 330-1 FIRE BARRIERS"

1.0 REQUEST FOR ADDITIONAL INFORMATION (RAI) OF SEPTEMBER 23, 1994

In the RAI of September 23, 1994, the NRC staff requested information regarding important barrier parameters, Thermo-Lag barriers outside the scope of the NEI program, ampacity derating, alternatives, and schedules.

No information was provided by the licensee to address the ampacity derating issue.

During a public meeting on March 14, 1995, with the licensees for the four lead plants for the resolution of Thermo-Lag issues, the staff responded to the question, "Will the resolution of the ampacity derating concern be deferred until agreement is reached on the appropriate testing protocol (i.e., IEEE P848)?" The staff reiterated its position, which was previously stated in the September 1994 RAI, that the ampacity derating concern could be resolved independently of the fire endurance concerns. After a review of the tests performed under the draft IEEE standard P848, the staff transmitted comments which were designated to ensure the repeatability of test results to the IEEE working group responsible for the test procedure. The licensee is requested to submit its ampacity derating evaluations, including any applicable test reports, in order to provide an adequate response to Generic Letter 92-08 reporting requirement 2(c).

2.0 REQUEST FOR ADDITIONAL INFORMATION OF DECEMBER 28, 1994

In the RAI of December 28, 1994, the staff requested information describing the examinations and inspections that will be performed to obtain the important barrier parameters for the Thermo-Lag configurations installed at Grand Gulf. In its response of March 29, 1995, the licensee stated that ampacity derating is an important element in Grand Gulf's comprehensive approach to resolve Thermo-Lag issues. The licensee stated a desire to proceed with ampacity testing at the earliest possible time if they had reasonable assurance that the proposed test protocol will be acceptable to the NRC.

On May 18, 1995, members of the NRC staff held a telephone conference call with NEI (Nuclear Energy Institute) representatives concerning ampacity derating issues for Thermo-Lag fire barriers. The staff indicated that the latest IEEE P848 draft procedure can be used by licensees or NEI as the basis for an ampacity derating test program. NEI agreed to review the Comanche Peak Steam Electric Station Unit 2 Safety Evaluation (SE) in order to develop a generic test program. The memorandum dated May 22, 1995, which documents the subject telephone conference meeting, is attached for your information. In

addition, a copy of the subject SE dated June 22, 1995, was sent to those licensees who rely on Thermo-Lag installations.

Please submit the anticipated test procedures or alternatively, a description of the analytical methodology including typical calculations which will be used to determine the ampacity derating parameters for the Thermo-Lag fire barriers that are installed at the Grand Gulf Nuclear Station.

May 22, 1995

NOTE TO: Brian W. Sheron, Director, DE, NRR
FROM: Carl H. Berlinger, Chief, EELB, DE, NRR
SUBJECT: MEMORANDUM OF RECORD

On May 18, 1995, members of the NRC staff (B. Sheron, C. Berlinger, P. Gill, M. Gamberoni and R. Jenkins) held a telephone conference call with Mr. Alex Marion and Mr. Biff Bradley of the Nuclear Energy Institute (NEI) on ampacity derating issues for Thermo-Lag fire barriers. Mr. Marion contacted the staff regarding two topics: (1) Status of the Safety Evaluation (SE) on the Comanche Peak Steam Electric Station (CPSES), Unit 2 Ampacity Derating Test Program; and (2) Staff Acceptance of the IEEE Standard P848, "Procedure for the Determination of the Ampacity Derating of Fire Protected Cables."

Dr. Berlinger stated that the subject SE for CPSES 2 had been completed and we expected that it will be transmitted to the licensee within the next two weeks. Dr. Berlinger agreed to notify Mr. Marion by phone after the SE had been issued by the staff. Due to potential generic applications the staff will provide a copy of the CPSES, Unit 2 SE to licensees with Thermo-Lag fire barriers.

The staff has been interfacing with the IEEE Task Force responsible for IEEE P848 over the last 2 years to improve the subject procedure. This effort has resulted in recent revisions to the subject procedure which addressed the majority of the concerns raised by EELB (reference: Letter dated 10/13/94 from C. Berlinger to A. K. Gwai). Although not all of the concerns were addressed by the IEEE Task Force Dr. Berlinger indicated that the latest IEEE P848 draft procedure can be used by licensees or NEI as the basis for an ampacity derating test program. The latest procedure revision (Draft 16) addresses the major test concerns regarding inductive heating and conduit surface emissivities effects.

The staff emphasized that licensees should submit the actual test procedures or plans to the staff for comment. After discussion of the various options to develop a generic test program NEI agreed to review the CPSES 2 SE and then contact the staff as necessary for further discussions or questions on this matter.

cc: Alex Marion, NEI

CONTACT: Ronaldo Jenkins, EELB/DE
415-2985

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