

September 25, 1995

MEMORANDUM TO: Herbert N. Berkow, Director  
 Project Directorate II-2  
 Division of Reactor Projects I/II

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 NOS. M85616 AND M85617)

Plant: Turkey Point Plant, Units 3 and 4  
 Licensee: Florida Power and Light Company  
 Review Status: Open

We have reviewed Florida Power and Light Company's responses of December 16, 1994; March 24, 1995; and July 13, 1995; to the requests for additional information (RAI) of September 19, 1994; December 26, 1994; and May 19, 1995; 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 forward this RAI 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 Nos.: 50-250  
 50-251

Attachment: As stated

CONTACT: R. Jenkins, NRR/DE  
 415-2985

DISTRIBUTION:

Central Files  
 PDR  
 EELB R/F  
 SPLB TSI File  
 BWSheron  
 GCLainas  
 RCroteau

MGamberoni  
 EConnell

DISK/DOCUMENT NAME: G:\SHARED\TURKEYPT.RAI

To receive a copy of this document, indicate in the box: "C" = Copy w/o attachment, "E" = Copy w/attachment, "N" = No copy

OFC	EELB:DE	E	SC:EELB:DE	E	C:EELB:DE	ME			
NAME	RVJenkins:jd		ASGill		JACalvo				
DATE	9/19/95		9/19/95		9/25/95	9/25 #6 sc	/ /		/ /

OFFICIAL RECORD COPY

*Memory*

9509270225 950925  
 PDR ADOCK 05000250  
 PDR

**NRC FILE CENTER COPY**

*DFD1*



Handwritten marks and scribbles in the top right corner.

Small, faint handwritten marks or text at the bottom right of the page.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 25, 1995

MEMORANDUM TO: Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects I/II

FROM: José A. Calvo, Chief  
Electrical Engineering Branch  
Division of Engineering *José A. Calvo*

SUBJECT: RESPONSE TO THE FOLLOWUP TO THE REQUEST FOR  
ADDITIONAL INFORMATION REGARDING GENERIC  
LETTER 92-08 (TAC NOS. M85616 AND M85617)

Plant: Turkey Point Plant, Units 3 and 4  
Licensee: Florida Power and Light Company  
Review Status: Open

We have reviewed Florida Power and Light Company's responses of December 16, 1994; March 24, 1995; and July 13, 1995; to the requests for additional information (RAI) of September 19, 1994; December 26, 1994; and May 19, 1995; 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 forward this RAI 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 Nos.: 50-250  
50-251

Attachment: AS stated

CONTACT: R. Jenkins, NRR/DE  
415-2985

TURKEY POINT PLANT, UNITS 3 AND 4  
DOCKET NOS. 50-250 AND 50-251  
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 19, 1994

In the RAI of September 19, 1994, the NRC staff requested information regarding important barrier parameters, Thermo-Lag barriers outside the scope of the Nuclear Energy Institute (NEI) program, ampacity derating, alternatives, and schedules.

In its submittal of December 16, 1994, the licensee asserted that all raceways containing power cables which are protected by Thermo-Lag fire barriers will fall within the scope of the NEI test program. The licensee stated that there is substantial margin in the applicable circuits even considering an additional 10 percent derating factor. The licensee will evaluate the results of future NEI tests for each application of Thermo-Lag at the Turkey Point Plant.

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 Institute of Electrical and Electronics Engineers (IEEE) Standard P848, the staff transmitted comments which were designed to ensure the repeatability of test results to the IEEE working group responsible for the test procedure.

2.0 REQUEST FOR ADDITIONAL INFORMATION OF DECEMBER 26, 1994

In the RAI of December 26, 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 Turkey Point Plant. In its submittal of March 24, 1995, the licensee believes that there is sufficient margin based on the present design to bound known ampacity derating test results. After an acceptable plan and test methodology have been established and agreed upon and testing has been performed, the licensee will review test results to determine if there is any impact on calculations.

On May 18, 1995, members of the NRC staff held a telephone conference call with Nuclear Energy Institute (NEI) on 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.

### 3.0 REQUEST FOR ADDITIONAL INFORMATION OF MAY 19, 1995

In the RAI of May 19, 1995, the NRC staff requested that the licensee 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).

In its submittal of July 13, 1995, the licensee asserted that the testing performed for Comanche Peak Steam Electric Station (CPSES), Unit 2, shows that the conduit ampacity derating values for the Turkey Point Plant are reasonable. Based on the findings of the NRC Safety Evaluation for CPSES, Unit 2 dated June 14, 1995, the licensee stated that there exists excess ampacity margin in the applicable Thermo-Lag enclosed electrical raceways. The licensee also stated that discussions have been proceeding for over two years between the NRC staff and NEI on an applicable test procedure for ampacity derating and the licensee is not aware of an approved generic ampacity test protocol which is authorized for use by the NRC staff.

The staff recognizes that most licensee may have excess ampacity margin using valid test data. However, those licensees who utilize industry test data must evaluate whether installed configurations are representative of the tested configurations. The subject evaluations should also analyze any deviations of the installed configuration with respect to the test configuration. The licensee did not indicate that CPSES Unit 2 Thermo-Lag fire barrier configurations were representative of Turkey Point Plant configurations.

In its submittal of July 13, 1995, the licensee referred to site specific calculations. If those calculations represent the licensee's final determination of ampacity derating parameters for Thermo-Lag fire barriers please forward a copy of the subject calculations for staff review. The licensee is requested to provide its site-specific schedule and plans for the resolution of the ampacity derating issue for Thermo-Lag fire barriers. If a NEI test program or analysis is expected to be utilized by the licensee please provide specific program details and incorporate any input by NEI into the licensee's overall schedule.

Finally, the staff expects that the licensee will submit in conjunction with the resolution of the fire endurance issues, the 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 Turkey Point Plant.