

May 8, 1997

Mr. James W. Langenbach
Vice President and Director, TMI
GPU Nuclear Corporation
Route 441 South
P.O. Box 480
Middletown, PA 17057-0480

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THERMO-LAG RELATED TO
AMPACITY DERATING ISSUES FOR THREE MILE ISLAND UNIT 1 (TAC NO.
M85615)

By letter dated October 22, 1996, GPU Nuclear Corporation responded to our request for additional information (RAI) related to Generic Letter 92-08 "Thermo-Lag 330-1 Fire Barriers" for Three Mile Island, Unit 1. Based on our review of your response, we find that additional information, as described in the enclosure, is required in order to continue our review. We request that you respond within 45 days of receipt of this letter.

Sincerely,

Original signed by

Bart C. Buckley, Senior Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosure: As stated

cc w/encl: See next page

Distribution

Docket File PMilano RVJenkins
PUBLIC OGC PEselgroth, RI
PDI-3 RF ACRS
SVarga JCalvo

Document Name: G:\BUCKLEY\TMITHER.RAI

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

OFFICE	PM:PDI-3	<input checked="" type="checkbox"/>	LA:PDI-3	<input checked="" type="checkbox"/>	(A)D:PDI-3		
NAME	BBuckley		EDunnington	STD	PMilano		
DATE	05/8/97		05/8/97		05/8/97		

OFFICIAL RECORD COPY

9705130197 970508
PDR ADOCK 05000289
P PDR

NRC FILE CENTER COPY

Three Mile Island Nuclear Station, Unit No. 1

cc:

Michael Ross
Director, O&M, TMI
GPU Nuclear Corporation
P.O. Box 480
Middletown, PA 17057

John C. Fornicola
Director, Planning and
Regulatory Affairs
GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, NJ 07054

Jack S. Wetmore
Manager, TMI Regulatory Affairs
GPU Nuclear Corporation
P.O. Box 480
Middletown, PA 17057

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Chairman
Board of County Commissioners
of Dauphin County
Dauphin County Courthouse
Harrisburg, PA 17120

Chairman
Board of Supervisors
of Londonderry Township
R.D. #1, Geyers Church Road
Middletown, PA 17057

Michele G. Evans
Senior Resident Inspector (TMI-1)
U.S. Nuclear Regulatory Commission
P.O. Box 311
Middletown, PA 17057

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Robert B. Borsum
B&W Nuclear Technologies
Suite 525
1700 Rockville Pike
Rockville, MD 20852

William Dornsife, Acting Director
Bureau of Radiation Protection
Pennsylvania Department of
Environmental Resources
P.O. Box 2063
Harrisburg, PA 17120

Dr. Judith Johnsrud
National Energy Committee
Sierra Club
433 Orlando Avenue
State College, PA 16803

REQUEST FOR ADDITIONAL INFORMATION
THREE MILE ISLAND, UNIT 1
FIRE BARRIER AMPACITY DERATING ISSUES
(TAC NO. M85615)

- 1) Sandia National Laboratories (SNL) made the following finding after a review of the licensee's cable ampacity assessment method which is based on the random fill tray correction factors from IPCEA P-46-426:

The methodology applied by the licensee was taken from IPCEA P-46-426, which in turn cites IPCEA publication P-33-440 as the basis for the cited ampacity correction factors for random fill trays. ICEA P-54-440 specifically states that the P-33-440 (a.k.a., P-46-426) methodology for random fill trays is superseded by the P-54-440 approach. Hence, SNL finds that the licensee has applied an outdated and inappropriate methodology to the analysis of its cable tray ampacity limits. While licensee approach may actually be conservative for some of the cases examined, SNL also demonstrated that the approach can lead to non-conservative results as well. SNL finds that the P-54-440 methodology is applicable to the licensee cases and should be included in the evaluation.

Given the above finding, the licensee is requested to provide an assessment of the applicable ampacity limits using the ICEA P-54-440 methodology for any cable in a cable tray with three or more cables and for those cables with an available ampacity margin (i.e., after the application of derating factors) of 30% or less including the following seven circuits recommended by SNL: LS6, ME1, ME2, MB11 (winter configuration only), MC12 (winter configuration only), CH61 and LS5.

- 2) It should be noted that the licensee response to the staff question regarding an assessment of overloaded cables as detailed in the Request for Information dated 7/5/96 may require reevaluation given satisfactory resolution for the concerns stated in Item 1 above. In addition, the licensee is requested to conservatively estimate the remaining cable life for any cables which may have operated under overloaded conditions.
- 3) Given that SNL noted apparent depth of fill and conductor discrepancies in the review of the Tray 531/533 case, the licensee is requested to document the applicable calculations to sufficient detail that both the depth of fill and ampacity limit calculations can be verified by SNL. (See Section 2.2.3 of the SNL Letter Report (Attachment 1(a)) for further details)

Attachment 1(a): Letter report to U.S. NRC, Rev. 0, dated April 10, 1997, prepared by Steve Nowlen of Sandia National Laboratories.

ENCLOSURE