

May 10, 1996

Mr. J. Knubel, Vice President  
and Director - TMI  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, PA 17057-0480

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - VIPRE-01 COMPUTER CODE  
(TAC NO. M92168)

Dear Mr. Knubel:

By letter dated April 25, 1995, GPU Nuclear Corporation submitted for the NRC Staff review the Topical Report 087, "TMI-1 Core Thermal-Hydraulic Methodology using the VIPRE-01 Computer Code." During the review of your Topical Report, the Staff has identified several questions. The Enclosure to this letter details the requested additional information. Timely response to this RAI will assure continuing review of your Topical Report.

Sincerely,

Original signed by:

Jan A. Norris, Sr. Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosure: Request for Additional  
Information

cc w/encl: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in black ink, appearing to read "Jan A. Norris, Sr.", written over a faint, illegible typed name.

Jan A. Norris, Sr. Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-289

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J. Knubel  
GPU Nuclear Corporation

Three Mile Island Nuclear Station,  
Unit No. 1

SS  
cc:

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Regional Administrator, Region I  
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King of Prussia, PA 19406

REQUEST FOR ADDITIONAL INFORMATION

REVIEW OF VIPRE-01 COMPUTER CODE

THREE MILE ISLAND, UNIT 1

DOCKET NO. 50-289

1. What training has been done to ensure that you have a good working knowledge of the VIPRE-01, i.e. able to set up the input, to understand and interpret the output results, to understand the applications and limitations of the code, and the perform analyses in compliance with the application procedure?
2. What is the source of the data used to benchmark the VIPRE code analysis? Justify why the use of 211 data points is sufficient. What statistical methods have been included as a result of the size of the data set?
3. Describe how your QA program complies with the requirements of Appendix B of 10 CFR Part 50. Do you have provisions for evaluating updates and implementing applicable updates related to VIPRE? What are the planned provisions for informing the code developer of any problems or errors discovered while using the VIPRE?
4. What type of fuel was used in the qualification of the VIPRE-01/BWC? Explain why that particular fuel type was selected.
5. Table 5.1 gives a range of validity for the DNB correlation. Please explain how your methodology assures that the correlation will not be used outside of the acceptable range.
6. Please add the 95th percentile line on Figure 5.1, "Measured CHF vs. VIPRE-01/BWC Predicted CHF."

Enclosure