



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

June 7, 1990

Docket No. 50-289

Mr. Henry D. Hukill, Vice President  
and Director - TMI-1  
GPU Nuclear Corporation  
P. O. Box 480  
Middletown, Pennsylvania 17057

Dear Mr. Hukill:

SUBJECT: RESPONSE TO GENERIC LETTER 89-10, "SAFETY-RELATED MOTOR-  
OPERATED VALVE (MOV) TESTING AND SURVEILLANCE" THREE MILE ISLAND,  
UNIT 1 (TAC NO. 75728)

On June 28, 1989, the NRC issued Generic Letter (GL) 89-10 requesting the establishment of a program to ensure the operability of all safety-related MOVs under design basis conditions. The program in GL 89-10 significantly expands the scope of the program outlined in NRC Bulletin 85-03 and its supplement.

In accordance with the schedule provided in the GL, a description of your MOV program should be available for review by June 28, 1990, or the first refueling outage after December 28, 1989, whichever is later. Information that should be contained in your program description was discussed during the workshops held in September 1989. The staff positions on questions presented during the workshops will be issued in the form of a supplement to the GL. As your program is developed, justification for any differences between your program and the GL exemplified by the workshop comments should be incorporated into your program description.

On December 28, 1989, you submitted a response to GL 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," regarding Unit 1 of the Three Mile Island Nuclear Station (TMI-1). The staff has the following comments on your submittal:

1. The attachment to the December 28 letter stated that inadvertent MOV operation will be prevented using your "currently accepted practices." You should review staff positions on questions from the workshops when the supplement for the GL is issued and justify any differences with the staff's positions in your program description.
2. You indicate that only events documented in the Final Safety Analysis Report (FSAR) will be considered in performing the design-basis review for MOVs within the GL program. Other documents might also contain events that are part of the TMI-1 licensing basis. You should ensure that all applicable events are identified and considered in the design-basis reviews.

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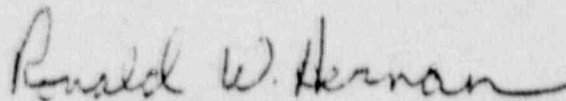
3. You propose "to perform in-situ full flow differential pressure tests only on those MOVs where this is possible without violating Technical Specifications or placing the plant systems in an unsafe configuration." You should discuss in your program description the instances where you choose not to test an MOV in-situ under design-basis conditions. In the event that testing of an MOV in-situ under design-basis conditions is not practicable and you cannot justify the application of other test data to that MOV, the staff recommends that you follow the "two stage" approach as outlined in the GL and discussed at the workshops. With this approach, you would set the limit switches for that MOV using the best data available and then would work to obtain applicable test data as soon as possible.
4. You state that "existing margins which conservatively bound valve actuator factors are considered acceptable justification for not performing full flow differential pressure testing unless data indicates that individual testing is necessary." As discussed at the workshops, recent research results and operating experience have revealed that testing of MOVs under static conditions does not always provide sufficient evidence to demonstrate that the MOVs will operate under design-basis conditions. In some cases, no operating margin exists despite the belief that the MOV had been assumed to be designed and adjusted conservatively. This is one reason for the staff's recommendation that MOVs be tested in-situ under design-basis conditions, where practicable. In instances where an MOV will not be tested in-situ under design-basis conditions even though such testing could have been practicable, you will be expected to justify the operability of that MOV under design-basis conditions.
5. You propose to omit the refueling outage that began in January 1990 from the three-refueling outage schedule recommended in the generic letter. The staff has indicated that licensees can omit refueling outages commencing before December 28, 1989. In this instance, the staff finds your proposal to not count the January 1990 outage as one of the three refueling outages included in the GL schedule acceptable. Nevertheless, the staff expects your resolution of this important safety issue not to extend beyond GL schedule of five years to any significant degree.

Mr. Henry D. Hukill

- 3 -

Your program description should be retained on-site for possible further NRC staff review.

Sincerely,

A handwritten signature in cursive script, reading "Ronald W. Hernan".

Ronald W. Hernan, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

cc: See next page

Mr. Henry D. Hukill  
GPU Nuclear Corporation

Three Mile Island Nuclear Station,  
Unit No. 1

cc:

G. Broughton  
O&M Director, TMI-1  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Francis I. Young  
Senior Resident Inspector (TMI-1)  
U.S.N.R.C.  
Post Office Box 311  
Middletown, Pennsylvania 17057

Richard J. McGoeey  
Manager, PWR Licensing  
GPU Nuclear Corporation  
100 Interpace Parkway  
Parsippany, New Jersey 07054

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

C. W. Smyth  
TMI-1 Licensing Manager  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 525  
1700 Rockville Pike  
Rockville, Maryland 20852

Ernest L. Blake, Jr., Esq.  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, N.W.  
Washington, D.C. 20037

Governor's Office of State Planning  
and Development  
ATTN: Coordinator, Pennsylvania  
State Clearinghouse  
Post Office Box 1323  
Harrisburg, Pennsylvania 17120

Sally S. Klein, Chairperson  
Dauphin County Commissioner  
Dauphin County Courthouse  
Front and Market Streets  
Harrisburg, Pennsylvania 17120

Thomas M. Gerusky, Director  
Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Resources  
Post Office Box 2063  
Harrisburg, Pennsylvania 17120

Kenneth E. Witmer, Chairman  
Board of Supervisors  
of Londonderry Township  
25 Roslyn Road  
Eilzabethtown, PA 17022



Mr. Henry D. Hukill

- 3 -

June 7, 1990

Your program description should be retained on-site for possible further NRC staff review.

Sincerely,

/s/

Ronald W. Hernan, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - 1/11  
Office of Nuclear Reactor Regulation

cc: See next page

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*Am w/ changes indicated*

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