

METROPOLITAN EDISON COMPANY  
JERSEY CENTRAL POWER & LIGHT COMPANY  
AND  
PENNSYLVANIA ELECTRIC COMPANY  
THREE MILE ISLAND NUCLEAR STATION, UNIT 1

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Operating License No. DPR-50  
Docket No. 50-289  
Technical Specification Change Request No. 104, Rev. 2

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This Technical Specification Change Request is submitted in support of Licensee's request to change Appendix A to Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1. As a part of this request, proposed replacement pages for Appendix A are also included.

GPU NUCLEAR CORPORATION

BY *H. S. Hill*  
Director, TMI-1

Sworn and Subscribed  
to before me this 10<sup>th</sup>  
day of July, 1984.

*Julia E. Park*  
Notary Public

JULIA E. PARK, Notary Public  
Middletown, Dauphin County, Pa.  
My Commission Expires Nov. 3, 1985

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PDR ADOCK 05000289  
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF

DOCKET NO. 50-289  
LICENSE NO. DPR-50

GPU NUCLEAR CORPORATION

This is to certify that a copy of Technical Specification Change Request No 104, Rev. 2 to Appendix A of the Operating License for Three Mile Island Nuclear Station Unit 1, has, on the date given below, been filled with executives of Londonderry Township, Dauphin County, Pennsylvania; Dauphin County, Pennsylvania; and the Pennsylvania Department of Environmental Resources, Bureau of Radiation Protection, by deposit in the United States mail, addressed as follows:

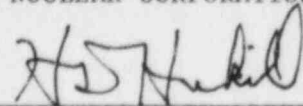
Mr. Jay H. Kopp, Chairman  
Board of Supervisors of  
Londonderry Township  
R. D. #1, Geyers Church Road  
Middletown, PA. 17057

Mr. John E. Minnich, Chairman  
Board of County Commissioners  
of Dauphin County  
Dauphin County Courthouse  
Harrisburg, PA. 17120

Mr. Thomas Gerusky, Director  
PA. Dept. of Environmental Resources  
Bureau of Radiation Protection  
P.O. Box 2063  
Harrisburg, PA. 17120

GPU NUCLEAR CORPORATION

BY



Director, TMI-1

DATE: July 10, 1984

I. TECHNICAL SPECIFICATION CHANGE REQUEST NO. 104, REV. 2

The Licensee requests the attached changed pages replace the following pages of the existing Technical Specifications:

Appendix A

Replace 4-11, 4-12, 4-13 and 4-27a

II. REASON FOR CHANGE REQUEST

As part of the Integrated RV Material Surveillance Program (RVMS) of the B&W Owners Group (B&W OG), TMI-1 Capsule TMI-1C, which is presently being irradiated at CR-3, is proposed to be withdrawn, tested and evaluated in accordance with a recommended new withdrawal schedule. Implementation of this new schedule will require a change to the Technical Specification for TMI-1, particularly Table 4.2-2.

III. SAFETY EVALUATION JUSTIFYING CHANGE

The following reasons provide the technical basis for the change:

1. The implementation of low leakage fuel cycles at most B&W designed plants, including Three Mile Island Unit 1, caused a corresponding decrease in the estimated end-of-life (EOL) fluences for affected reactor vessels. If capsule withdrawal continues according to the current schedule, a major portion of the capsule currently undergoing irradiation will accumulate fluences well in excess of estimated vessel EOL. Consequently, the data obtained from evaluation of these capsules will not be useful for evaluation of corresponding vessel integrity. The attached Table 1 for TMI-1 illustrates the impact of this fuel cycle design change. The revised schedule will assure acquisition of representative capsule data which can be related to the irradiated construction of the vessel.
2. The withdrawal schedule, as specified in ASTM Spec. E-185-79 referenced in 10CFR50, Appendix H, requires that capsules be withdrawn at designated intervals such that the capsule fluence will correspond to specific conditions of the reactor vessel with respect to irradiation damage. Although the B&W OG Integrated RVMS was designed prior to E-185-79, regulations required that the program be maintained, to the extent practical, with the updated requirements. Therefore, to insure that capsules are withdrawn in a manner consistent with the required compatibility of capsule fluence and RV fluence, it is necessary to revise the current withdrawal sequence.

The attached Table 4.2-2 shows the proposed change. This table, which is part of the TMI-1 Tech Spec should cover the recommended new withdrawal schedule of the B&WOG. B&W and the Materials Committee Chairman have contacted the NRC and obtained Staff concurrence that the proposed capsule removal schedule is acceptable.

Additionally, Sections 4.2.5 and 4.2.6 have been deleted. Section 4.2.5 currently requires submission of a special report or an application for a License Amendment should Crystal River - Unit 3 cumulative reactor utilization factor (CRUF) drop below 65%. The original TSCR No. 104 requested to change the method in which CRUF was to be calculated.

The integrated RVMSR is continuously being updated to reflect actual fluence accumulations in the operating host reactors. Since the B&WOG Integrated Reactor Vessel Material Surveillance Program has been revised, there is no longer a need for either a special report or an application for a license amendment based on Crystal River - Unit 3 CRUF. The special report requested in 4.2.6 was submitted September 17, 1982 (5211-82-255) so this requirement has been fulfilled and need not remain in the TMI-1 Technical Specifications.

#### IV. NO SIGNIFICANT HAZARDS CONSIDERATION

The proposed change to the Technical Specifications for TMI-1 revises the insertion and withdrawal schedule for Capsule TMI-1C. This will refine our methodology to satisfy the requirements of 10 CFR 50 Appendix G and H, and also results in a more realistic evaluation of vessel integrity.

#### V. AMENDMENT CLASSIFICATION (10 CFR 170.22)

Check No. 034612 was provided with Technical Specification Change Request No. 104, Rev. 0 dated June 8, 1981.

#### VI. IMPLEMENTATION PERIOD

It is requested that this amendment be made effective immediately upon issuance.