

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

Operating License No. DPR-50
Docket No. 50-289
Technical Specification Change Request No. 146

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 20th
day of August, 1985.

Sharon P. Brown
Notary Public

SHARON P. BROWN, NOTARY PUBLIC
MIDDLETOWN BORO, DAUPHIN COUNTY
MY COMMISSION EXPIRES JUNE 12, 1989
Member, Pennsylvania Association of Notaries

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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

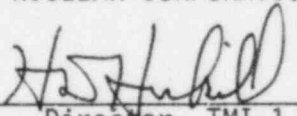
This is to certify that a copy of Technical Specification Change Request No. 146 to Appendix A of the Operating License for Three Mile Island Nuclear Station Unit 1, has, on the date given below, been filed with executives of Londonderry Township, Dauphin County, Pennsylvania; Dauphin County, Pennsylvania; 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. Fred Rice, 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: August 20, 1985

TECHNICAL SPECIFICATION CHANGE REQUEST NO. 146

The Licensee requests the attached pages replace 3-58, and 4-10 of the existing Technical Specifications.

REASON FOR CHANGE REQUEST

- A. Previously a Gross activity analysis, or more precisely a Gross beta-gamma analysis, was performed as a method to determine if an iodine analysis was to be performed. Performing an isotopic analysis for Dose Equivalent I-131 concentration by using a High Purity Germanium Detector is significantly easier than "wet chemistry" methods previously used to check for iodine. Therefore, the need for a Gross Beta Gamma Analysis as a way to reduce the possible need for the iodine analysis is no longer required. This change results in eliminating Gross activity analysis and in its place performing an isotopic analysis for Dose Equivalent I-131 concentration. The isotopic analysis will be performed at least once per 72 hours as opposed to the weekly Gross activity analysis. Along with the change to isotopic analysis, the allowable limit is reduced from 1.0 μ Ci/cc as I-131 to 0.10 μ Ci/gram as Dose Equivalent I-131.
- B. The determination of Condenser Partition Factor is deleted as the information that is obtained is not used for any purpose.

SAFETY EVALUATION JUSTIFYING CHANGE

- A. Secondary Coolant System activity is directly related to leakage in the steam generators. The concern for the amount of activity in the Secondary Coolant System is directed to the I-131 concentration due to possible environmental release via the main steam relief valves during a loss of load condition. By limiting the Dose Equivalent I-131 concentration in the Secondary Coolant System, the dose resulting at the site boundary will be limited to a small fraction of 10 CFR Part 100 limits.

This change results in a determination of the Dose Equivalent I-131 concentration once per 72 hours whereas the Gross activity was only required on a weekly basis. In addition, the allowable specific activity of Dose Equivalent I-131 is reduced by more than a factor of 10 from approximately 1.4 μ Ci/cc to 0.10 μ Ci/gram. (Note: Dose Equivalent I-131 activity is approximately 1.4 times I-131 activity.) Performing the analysis more frequently and at a lower allowable limit results in a more conservative method.

- B. Since determining a Condenser Partition Factor as specified in this section was not used for any purpose, there is no need to perform the analysis. Deleting the analysis therefore does not impact any safety consideration.

SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

This proposed change is similar to example ii of the "Amendments not Likely to Involve Significant Hazards Consideration" from Federal Register Vol. 48, No. 67 at 14870 on April 6, 1983.

SIGNIFICANT HAZARDS CONSIDERATION EVALUATION (Cont'd)

The specification requirement is to ensure the dose at the site boundary during an environmental release of main steam will be below 10 CFR Part 100 limits. This change results in a more frequent analysis and a lower allowable limit of Dose Equivalent I-131. Therefore, operation of TMI-1 in accordance with this Tech. Spec. Change Request:

- a) lowers the consequence of a loss of load condition due to the lower allowable limit of Dose Equivalent I-131 and therefore would not involve a significant increase in the probability or consequence of an accident previously affected.
- b) does not involve a modification to the existing plant equipment and therefore would not create the possibility of a new or different kind of accident from any accident previously evaluated.
- c) does not involve changes which would affect the safety analysis of the plant and therefore would not involve a significant reduction in the margin of safety.

Therefore, significant safety hazards are not associated with this change.

IMPLEMENTATION

It is requested that this Amendment become effective 60 days after receipt, to allow for the necessary procedural revisions to be put in place.

AMENDMENT FEE (10 CFR 170.21)

Pursuant to the provisions of 10 CFR 170.21, attached is a check for \$150.00