

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. 116 Revision 1

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.

NUCLEAR CORPORATION

By H. H. Hill
Director, TMI-1

Sworn and subscribed
to before me this 24th
day of November, 1983.

Darla Jean Berry
Notary Public

DARLA JEAN BERRY, NOTARY PUBLIC
MIDDLETOWN BORO, DAUPHIN COUNTY
MY COMMISSION EXPIRES JUNE 17, 1985
Member, Pennsylvania Association of Notaries

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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. 116 Rev. 1 to Appendix A of the Operating License for Three Mile Island Nuclear Station Unit 1, has, on the date given below, been filed with the U.S. Nuclear Regulatory Commission and been served on the chief 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:

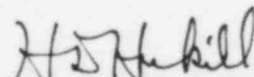
Mr. Jay H. Kopp, Chairman
Board of Supervisors of
Londonderry Township
R. D. #1, Geyers Church Road
Middletown, PA 17057

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

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

GPU NUCLEAR CORPORATION

BY


Director, TMI-1

DATED: November 24, 1983

TECHNICAL SPECIFICATION CHANGE REQUEST NO. 116 REVISION 1

I. Technical Specification Change Request No. 116 Rev. 1

The Licensee requests that attached revised pages replace the following pages of the existing Technical Specifications.

Replace: iii, 3-8, 3-9, 3-41, 3-41a, 3-62a, 3-62b, 4-5a, 4-9, 4-10, 4-34, 4-34a, 4-34b, 4-37, 4-38, 4-55b, 4-55c, 4-60, 4-61, 4-62, 4-76, 6-17, and insert new pages: 3-9a, 3-9b, 3-41b.

II. Reasons for Change

The purpose of this Technical Specification Change Request is to resolve NRC safety issue B-24 for TMI-1. Detailed changes are listed below.

| <u>Page No.</u> | <u>Specific Change</u> | <u>Reason for Change</u> |
|------------------|--|---|
| iii | DELETED 4.4.3 | H ₂ Purge System is no longer required. TSCR #114 supersedes H ₂ detector surveillances of 4.4.3.3. |
| 3-8 | Added T.S. for iodine spiking for primary coolant. | NRC requested change to assist in resolution of NRC safety issue B-24. |
| 3-9 & 3-9a | Added T.S. for iodine spiking for primary coolant. | NRC requested change to assist in resolution of NRC safety issue B-24. |
| 3-9b | Added Figure 3.1-2a. | Figure required for new I-131 primary coolant activity requirement above. |
| 3-41 | Action requirements to purge valves have been added and TS 3.6.6 revised to exclude purge valves. T.S. 3.6.7 added for purge valves. | To provide more conservative guidance for responding to an inoperable purge valve and separate it from the guidance for other containment boundary valves. |
| 3-41a | Added TS 3.6.8, 3.6.9 and 3.6.10. | TS 3.6.8 was added to provide guidance concerning inoperable purge valves. TS 3.6.9 was added to limit purge valve opening during operation and hot shutdown by use of positive position limiters. |

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| | | TS 3.6.10 was added to waive the position limiting requirement when the reactor is in cold shutdown. |
| 3-41b | Basis change. | The bases have been changed to reflect the new specification added. |
| 3-62a & b | TS 3.15.2 changed to add containment integrity considerations, and reflect true system design bases, and flow rate. | <p>T.S. 3.15.2.1 is revised to be applicable only when the reactor building is being purged since when no purging is being accomplished it is not needed.</p> <p>T.S. 3.15.2.2c was deleted since it was a surveillance requirement and was placed in new T.S. 4.12.2.2e.</p> <p>T.S. 3.15 bases are revised to delete discussions of purge under post LOCA conditions since the system is designed only for addressing normal releases (i.e. purging) and fuel handling accidents in containment.</p> |
| 4-5a | RM-G5 is excepted from quarterly calibration | RM-G5 is exempted from quarterly calibration since it is in the reactor building and to minimize entries when purging is not permitted (for ALARA reasons) calibration is deferred until shutdown when full purging is permitted. |
| 4-9 & 4-10 | Added surveillance for iodine spiking. | Surveillances for coolant iodine have been added consistent with the changes on pages 3-8, 3-9, 3-9a, and 3-9b. |
| 4-34 | T.S. 4.4.1.2.5 changed to reflect purge valve test frequency and acceptance criteria. Item "d" in current T.S. changed to item "e". | NRC requested change to assist in resolution of NRC safety issue B-24. |
| 4-34a | <ol style="list-style-type: none"> 1. T.S. 4.4.1.6 changed to require only refueling frequency operability checks if purging is not permitted. 2. T.S. 4.4.1.7 added. | <ol style="list-style-type: none"> 1. Six month checks of personnel and emergency hatch interlocks involve containment entries which may not be advisable because of ALARA reasons without a purge of containment. |

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| | | 2. NRC requested change to assist in resolution of NRC safety issue B-24. |
| 4-34b | Last paragraph added to bases for T.S. 4.4. Discussion of new T.S. 4.4.1.7. | NRC requested change to assist in resolution of NRC safety issue B-24. |
| 4-37 & 4-38 | Tech. Spec. Section 4.4.3 deleted, including bases | With the installation of a H ₂ recombiner and provisions for a second H ₂ recombiner completed the need for the H ₂ purge system has been eliminated. H ₂ purge exhaust isolation valves will remain closed, since the H ₂ purge system is not relied upon to mitigate an accident. |
| 4-55b & 4-55c | T.S. 4.12.2.1 and 4.12.2.2a surveillance frequency changed to 2 years instead of 18 months. 72 hr. retest requirement replaced with requirement that retest be performed within 30 days of refueling. Existing T.S. 4.12.2.2.e. changed. Basis also changed. | Lower system usage should decrease potential for filter inoperability therefore surveillance frequency may be adjusted. Since H ₂ purge is not required R.B. purge filters no longer perform an operating accident mitigation function. The requirement to run purge exhaust fans monthly is superfluous since purge fans are no longer relied upon to mitigate an accident during operation. Surveillance from former T.S. 3.15.2c inserted as 4.12.2.2e. Also correct title for unit superintendent inserted in basis. |
| | T.S. 4.12.2.3 changed to require air distribution test at full R.B. purge system flowrate. | Clarification of existing Tech Spec wording. |
| 4-60, 4-61 & 4-62 | T.S. 4.17.1 & 4.17.2 changed to alter surveillance frequency when purging is not permitted. Basis also changed. P. 4-62 is only text carry-over. | Without purge operation noble gas build-up in containment may pose an ALARA concern for personnel in doing surveillances at existing frequency. |
| 4-76 | Note added to T.S. 4.18.6.1a&b. | Same as P. 4-60 above. |
| 6-17 | Added item (6), new special report to T.S. 6.9.3.A. | Report is required per new T.S. 3.1.4 |

III. Safety Evaluation and Justification of Change

This Technical Specification Change Request is submitted in response to NRC letter dated July 8, 1983. After submittal of TSCR #116 the NRC staff both requested and provided additional information relative to the resolution of Safety Issue B-24. It became apparent, that with the new requests of inclusion of more restrictions in the Technical Specifications, that a revision to TSCR #116 was needed.

Each of the specific changes requested by the NRC staff have been appropriately incorporated in the new changed pages to Appendix A to the license. The NRC requested changes are incorporated in accordance with the NRC staff accepted method for the resolution of Safety Issue B-24 and as such do not:

- a) involve an increase in the probability of occurrence or the consequences of an accident previously evaluated, since additional surveillance requirements have been provided to assure the operability of purge isolation valves and more restrictive Reactor Coolant Activity limits have been incorporated;
- b) create the possibility of an accident or malfunction of a new or different kind of accident from any previously evaluated, since limitations on purge valve position during operation have been included, thereby ensuring containment isolation capability; or
- c) involve a reduction in the margin of safety, for reasons stated above which ensure that offsite doses for postulated LOCA's will be kept within acceptable limits and improved post accident hydrogen management is provided by changes approved by License Amendment 87.

Additionally, flexibility has been provided for surveillances in the Containment, since restrictions on purging during operation may pose an ALARA concern.

IV. No Significant Hazard Considerations

Operation of TMI-1 in accordance with this Tech. Spec. Change Request would not:

- 1) involve a significant increase in the probability or consequences of an accident previously evaluated since this change increases restrictions on reactor coolant activity and purge valve operation thereby enhancing safety;
- 2) create the possibility of a new or different kind of accident from any accident previously evaluated; it provides additional assurance that the plant (i.e. purge isolation) will respond to an accident as designed; or

- 3) involve a significant reduction in a margin of safety since it increases the margin of safety by providing additional assurance that offsite doses for postulated LOCA's will be kept within acceptable limits and improved post accident hydrogen management is provided by a hydrogen recombiner (License Amendment 87).

V. Implementation

Because of the extensive nature of this change and the need to train operating personnel it is requested that the implementation of this amendment be six weeks after issuance.

VI. Amendment Classification (10 CFR 170.22)

This change request involves a single safety issue and is, therefore, considered a class III amendment. This is a revision to a previously submitted change (No. 116) for which a fee was paid. Therefore no additional fee is required.