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June 13, 1989
C311-89-2040

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Technical Specification Change Request No. 191

In accordance with 10 CFR 50.4 (b)(1), enclosed is one (1) original, and in addition ten (10) conformed copies of Technical Specification Change Request No. 191.

This TSCR includes changes related to 10CFR 50 Appendix J Local Leakage Rate testing (LLRT) including the relocation of LLRT component and valve lists from the Technical Specifications to the Updated FSAR. Removal of tabular listings from the Technical Specifications is an area of Technical Specifications improvement that has been identified by the Atomic Industrial Forum (AIF) and the NRC. Relocation of these tabular listings to the Updated FSAR would allow future changes to these lists, as permitted by the regulations, to be made without a license amendment. This would relieve both the NRC and GPU-N of this administrative burden.

This letter assumes that the license amendment authorizing this change will be approved by the NRC before the end of TMI-1's Operating Cycle 7 in early January, 1990. Therefore, this request does not include changes that will be needed as a result of modifications currently planned for the Cycle 8 refueling outage (OR). If the NRC does not intend to approve the amendment authorizing the relocation of valve and component lists from the Technical Specifications to the Updated FSAR prior to startup for TMI-1 Cycle 8 operation in February, 1990, GPU-N requests to be notified by June 30, 1989 in order to allow sufficient time for preparation of a separate request for changes that will be needed to accommodate the OR modifications.

Enclosed is a copy of the revised FSAR pages that GPU-N intends to submit in July, 1989 as part of FSAR Update 8. The new FSAR Tables 5.7-2 and 5.7-3 currently reflect changes regarding valves AH-V1A/B/C/D and LR-V10 as described in this request. Therefore, in order to ensure the accuracy of Tables 5.7-2 and 5.7-3 in our July, 1989 submittal, GPU-N requests to be notified by June 30, 1989 of any changes to these tables that might be expected as a result of NRC approval of TSCR 191.

GPU Nuclear Corporation is a subsidiary of the General Public Utilities Corporation

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June 13, 1989

Also enclosed is one signed copy of the Certificate of Service for this request to the chief executives of the township and county in which the facility is located, as well as the Bureau of Radiation Protection.

Pursuant to 10 CFR 50.91(a)(1), we enclose our analyses, using the standards in 10 CFR 50.92 of significant hazards considerations. As stated above, pursuant to 10 CFR 50.91(a) of the regulations, we have provided a copy of this letter, the proposed change in Technical Specifications, and our analyses of significant hazards considerations to Thomas Gerusky, the designated representative of the Commonwealth of Pennsylvania.

Sincerely,

J. Broughton for

H. D. Hunt
Vice President & Director, TMI-1

HDH/MRK/spb

- Enclosures: 1) Technical Specification Change Request No. 191
2) Certificate of Service for Technical Specification Change Request No. 191
3) Draft FSAR pages related to TSCR 191 that are intended for GPUN submittal of FSAR Update B in July, 1989

cc: J. Stoltz
R. Hernan
W. Russell
F. Young

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. 191

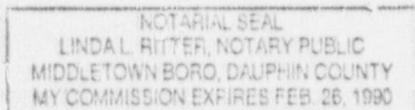
This Technical Specification Change Request is submitted in support of Licensee's request to change Appendix A to Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1. As a part of this request, proposed replacement pages for Appendix A are also included.

GPU NUCLEAR CORPORATION

BY: J. H. Thompson for M. A. Huckle
Vice President & Director, TMI-1

Sworn and Subscribed
to before me this 13th
day of June, 1989.

Linda L. Ritter
Notary Public



Member, Pennsylvania Association of Notaries

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF
GPU NUCLEAR CORPORATION

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

CERTIFICATE OF SERVICE

This is to certify that a copy of Technical Specification Change Request No. 131 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. Kenneth E. Witmer, Chairman
Board of Supervisors of
Londonderry Township
25 Roslyn Road
Elizabethtown, PA 17022

Ms. Sally S. Klein, 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: J.H.Brown for H.D. Witmer
Vice President & Director, TMI-1

DATE: June 13, 1989

I. TECHNICAL SPECIFICATION CHANGE REQUEST (TSCR) NO. 191

GPUN requests that the attached revised pages 4-32, 4-33, 4-34, 4-34a, and 4-34b replace the respective pages and that page 4-34c be deleted from the TMI-1 Technical Specifications.

II. REASON FOR CHANGE

This submittal requests changes to the listing of Reactor Building Containment Isolation penetrations and valves that are required to be tested in accordance with 10CFR 50 Appendix J Local Leakage Rate type "B" and "C" tests (LLRT) as follows:

- A. Changes or deletion from the lists to accurately reflect the requirements of 10CFR 50 Appendix J:
 1. Relocation of the Reactor Building Containment Purge Supply/Exhaust valves (AH-V1A/B/C/D) from the list of type "B" components to the list of valves requiring a type "C" test.
 2. LR-V10 is a valve for which the 10CFR 50 Appendix J test requirements were not intended and therefore this valve is to be deleted from the list of valves requiring a type "C" test.
- B. Addition of recently installed valves PP-V210,211,212,213 to the list of valves requiring LLRT type "C" testing in accordance with 10CFR 50 Appendix J to bring the lists up to date.
- C. Removal of the lists of Reactor Building Containment Isolation penetrations and valves from the Technical Specifications and relocation of these component lists to the FSAR.
- D. Deletion of requirements for maintenance of the Penetration Pressurization system and for periodic surveillance of the Penetration Pressurization System rotameters.
- E. Editorial changes and corrections to improve clarity and consistency to conform the above changes to the amendment approving this Technical Specifications Change Request (TSCR 191).

This letter assumes that the amendment authorizing this change will be approved by the NRC prior to the end of TMI-1 Operating Cycle 7 in early January, 1990. Therefore, this request does not include the changes that are expected to result from modifications planned for the cycle 8 refueling outage (8R). If the amendment authorizing the relocation of valve and component lists from the Technical Specifications to the Updated FSAR is not to be approved prior to startup for TMI-1 Cycle 8 operation, then GPUN requests to be informed in order that we may submit a separate request for changes that will be needed to accommodate the 8R modifications.

Also, attached is a copy of the FSAR revised pages that GPU will incorporate into FSAR Update 8 which is to be submitted in July, 1989. These new FSAR Tables 5.7-2 and 5.7-3 currently reflect changes that are part of this request. Therefore, to ensure that Tables 5.7-2 and 5.7-3 will be correct in our July, 1989 submittal, GPU requests to be notified no later than June 30, 1989 if the NRC does not intend to approve the changes identified in A above regarding AH-V1A/B/C/D and LR-V10.

III. SAFETY EVALUATION JUSTIFYING THE CHANGE

A. Corrections and deletions to the list which conform to 10CFR 50 Appendix J Local Leakage Rate test requirements:

1. AH-V1A/B/C/D:

The Reactor Building Containment Purge Supply/Exhaust valves (AH-V1A/B/C/D) are to be moved from the list of type "B" components to the list of valves requiring a type "C" test. An editorial change to Technical Specification 4.4.1.2.5.c is therefore being made to provide the appropriate reference to the applicable 10CFR 50 Appendix J, section (III.D.3). This change is editorial because the purpose of this reference is to refer to the applicable test frequency and not to require that the purge valves be included in the list of valves requiring a type "B" test. The test methodology and acceptance criteria for purge valve testing will remain the same.

Special tests and inspections of the purge valves would continue to exceed the Appendix J test requirements for Containment Isolation Valve type "C" tests. Moving the purge valves from the list of valves requiring a type "B" test to the type "C" list could result in a change in purge valve test requirements in that it would no longer be required to test the valves prior to startup if opened following a Type "A" or "B" test if the startup were to occur \leq 92 days since the last test. The existing special tests of the purge valves each quarter and examinations each refueling interval provide adequate assurance of timely detection of purge valve seat degradation and inoperability.

LLRT Type "B" Test requirements apply to containment penetrations whose design incorporates resilient seals, airlock doors, and doors with resilient seals or gaskets. In accordance with 10CFR 50 Appendix J, the type "C" test is clearly specified to apply to valves such as AH-V1A/B/C/D that "provide a direct connection between the inside and outside atmospheres of the primary reactor containment under normal operation, such as purge and ventilation, ... valves." Apparently, because the design of the purge valves incorporates the use of resilient seals, these valves were inappropriately included in the original TMI-1 Technical Specifications as type "B" components. The purge valves were the only valves included in the list of type "B" components.

Because of the concern for timely detection of seal degradation for valves with resilient seals, it was part of the resolution of the NRC's generic issue, Multi-plant Action (MPA) B-24, to increase the frequency of purge valve testing to quarterly (Technical Specification section 4.4.1.2.5.d), add examination requirements for the purge valve seats each refueling interval and require replacement of the seals each refueling outage after a five (5) years service life (Technical Specification section 4.4.1.4). Tests of the purge valves on a quarterly frequency in conjunction with refueling interval inspections is adequate to detect seal degradation and provide for timely determination of purge valve inoperability. Therefore, placing the purge valves on the list of valves requiring a 10CFR 50 Appendix J, type "C" test does not pose a safety concern.

2. LR-V10:

LR-V10 has been included in the list of valves requiring a type "C" test ever since the original TMI-1 Technical Specifications was issued even though such a test is not needed in meeting the Local Leakage Rate test requirements of 10CFR 50 Appendix J. LR-V10 is a manual handwheel operated test connection valve between containment isolation valve LR-V49 and a containment isolation blind flange associated with containment penetration #417. LR-V10 has a blind flange installed at its outlet resulting in double manual isolation of the test connection. Therefore LR-V10 should be deleted from the list of valves requiring a type "C" test.

B. Addition of valves to the list of valves requiring Local Leakage Rate tests in accordance with 10CFR 50 Appendix J to bring the list up to date as a result of a recent modification:

PP-V210,211,212,213 are normally closed, handwheel operated Penetration Pressurization System globe valves which are being added to the list of valves for which the type "C" test requirements apply. These valves are being added to update the list as a result of recent plant modifications and reflect all of the valves that are required to be tested in accordance with 10CFR 50 Appendix J Local Leakage Rate test requirements.

On November 7, 1986 TMI-I failed an as-found Reactor Building Integrated Leakage Rate Test (ILRT). This event was reported to the NRC in a Licensee Event Report (LER) 86-13. In a followup action related to this event, Penetration Pressurization System check valves PP-V100, 103, 132, and 135 were changed to globe valves and renumbered to PP-V210, 211, 212, and 213. These valves will be maintained closed to serve a containment isolation valve function.

C. Relocation of the lists to the FSAR

Removal of tabular listings from the Technical Specifications is an area of Technical Specifications improvement that has been identified by the Atomic Industrial Forum (AIF) and the NRC.

The tabular listing of penetration components and valves requiring LLRT are to be removed from Technical Specification section 4.4.1.2.1 and relocated to the FSAR in Update 8, dated 7/89. The new Updated FSAR tabular listing of penetrations and valves requiring Local Leak Rate tests in accordance with 10CFR 50 Appendix J (TMI-1 Updated FSAR Tables 5.7-2 and 5.7-3) are enclosed. Requirements for containment isolation, the action statements and the specific test requirements associated with the listed components and valves will remain in the Technical Specifications.

A Technical Specification section 4.4.1.2.3 reference to the list is being deleted and a statement is being added to the bases which refers to the list in the Updated FSAR.

Future changes to the list of Containment Isolation Valves requiring Local Leakage Rate Tests in Table 5.7-2 and 5.7-3 in the FSAR would only be implemented following completion of a safety evaluation in accordance with 10CFR 50.59 and a review by the Plant Review Group (PRG). Relocation of these tabular listings to the Updated FSAR would allow future changes to these lists, as permitted by the regulations, to be made without a license amendment. This would relieve both the NRC and GURN of this administrative burden.

D. Deletion of the requirements for quarterly readings of the Penetration Pressurization System rotameters (Technical Specification surveillance 4.4.1.2.5.e.):

The Penetration Pressurization system is capable of being lined up to constantly pressurize all mechanical penetrations to greater than the building design pressure. Neither 10CFR 50 Appendix J nor any other code requires the constant pressurization of any TMI-1 containment isolation device. Likewise, the Standard Technical Specifications do not require periodic monitoring of the Penetration Pressurization System. The original purpose for the Penetration Pressurization System and related surveillance tests would have been to permit a reduced LLRT program or justify exemptions from the 10CFR 50 Appendix J which was not issued until after the issuance of the TMI-1 Technical Specifications. However, all containment penetrations with resilient seals, process system flanges, valves, and gaskets requiring periodic leak test per Appendix J are now tested using Type "B" or "C" tests with no credit or exemptions for the use of a fluid blocking system. During ILRT (Type "A", integrated leakage rate tests), the Penetration Pressurization System is disabled and no credit is taken for the system.

The Penetration Pressurization system is not qualified by design or fabrication to act as a fluid blocking system as defined by Appendix J. TMI-1 therefore takes no credit in the safety analysis for the active function of the system. Likewise, there is no code or Standard Technical Specification requiring the quarterly use of the Penetration Pressurization System for Leakage Rate testing. The sole safety related function of the Penetration Pressurization system pertains to the fact that interconnections to safety related systems act as qualified pressure boundaries. Deletion of the requirements for quarterly monitoring of Penetration Pressurization System rotameters is therefore justified.

E. EDITORIAL CHANGES AND CORRECTIONS

1. "AEC" has been changed to "NRC" on page 4-32.
2. "FSAR Section 5" has been changed to "FSAR Chapter 5" on revised page 4-34b.
3. "(0.06 percent)" in the Bases, on revised pages 4-34a and 4-34b, has been changed to "0.6 L_m" and moved to the end of the sentence in which it is located on revised page 4-34a. The purpose of this change is to improve clarity and to be consistent with specification 4.4.1.2.3. terminology. The meaning is unchanged.
4. "27.5 psig" in the Bases on page 4-34a has been changed to "30 psig" to be consistent with the change to Specification 4.4.1.1.3 that was made in Amendment 63, dated March 30, 1981. This change is editorial in that the Bases should have been changed in Amendment 63 to be consistent with the change to Specification 4.4.1.1.3. Reduced pressure testing in accordance with Specification 4.4.1.1.3 is not currently approved for use, however GPU considers this a viable test method that has been included in the TMI-1 design and this method may be approved by the NRC some time in the future. For this reason we would like to clear up an inconsistency but we do not wish to delete Specification 4.4.1.1.3 at this time.
5. An incorrect reference in Section 4.4.1.5 on revised page 4-34 has been changed to correctly reference the acceptance criteria of Specification 4.4.1.1.6.
6. Other editorial changes and corrections that are not changes limited to punctuation only are discussed in A. through D. above.

In summary, these changes are either purely administrative in nature or changes of minor technical significance and are intended to make corrections that are justified and appropriate in accordance with the requirements of 10CFR 50 Appendix J. No question of safety is involved in the changes reflected in this Technical Specification Change Request.

IV. NO SIGNIFICANT HAZARDS CONSIDERATIONS

GPU has determined that this Technical Specification Change Request poses no significant hazards as defined by the NRC in 10CFR 50.92. This change is considered to be administrative in nature and does not involve significant hazards consideration as evaluated below.

1. Operation of Three Mile Island Nuclear Station, Unit-1, in accordance with this change would not involve a significant increase in the probability or consequences of an accident previously evaluated because the proposed Technical Specification change does not modify or create any accident initiating condition. This change provides for update of the list of components subject to 10CFR 50 Appendix J Type "C" tests to add additional components to the list, improvement in the Technical Specifications by relocating lists to the FSAR, and deletion of certain test requirements that are not needed to meet the requirements of 10CFR 50 Appendix J. Deletion of the requirements for Penetration Pressurization System quarterly rotameter readings does not result in changes contrary to the requirements of 10CFR 50 Appendix J or the NRC's Standard Technical Specifications for Babcock and Wilcox Pressurized Water Reactors (NUREG-0103). The changes included in this request are either purely administrative in nature or are of minor technical significance and have no significance related to safe plant operation.
(10CFR 50.92(c)(1))
2. Operation of Three Mile Island Nuclear Station, Unit-1, in accordance with this change would not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed Technical Specification change does not modify or create any accident initiating condition. The proposed changes to the LLRT test requirements in Technical Specifications will result in technical specification requirements that meet or exceed the requirements of 10CFR 50 Appendix J.
(10CFR 50.92(c)(2))
3. Operation of Three Mile Island Nuclear Station, Unit-1, in accordance with this change would not involve a significant reduction in a margin of safety because all Updated Final Safety Analysis Report (USAR) assumptions remain unchanged. The proposed changes to the LLRT test requirements will result in technical specification requirements that meet or exceed the requirements of 10CFR 50 Appendix J. A minor change in the test requirements for the purge valves would not change the test methodology or the acceptance criteria and would not significantly affect the assurance of the early detection of purge valve seat degradation and inoperability because the additional examinations and increased (quarterly) test frequency of the purge valves beyond the Appendix J test requirements would be retained. Deletion of the requirements for Penetration Pressurization System quarterly rotameter readings is not discussed in the basis for any

TMI-1 Technical Specification. Any reduction in test requirements resulting from this change would not significantly affect the timely detection of containment isolation valve or penetration inoperability.
(10CFR 50.92(c)(3))

The Commission has provided guidelines pertaining to the application of the three standards by listing specific examples in the Federal Register (48 FR 14870). This proposed change is considered to be in the same category as examples (i), (ii), or (iv) of the "Amendments Not Likely to Involve Significant Hazards Consideration" from that listing. Thus, operation of the facility in accordance with the proposed amendment involves no significant hazards considerations.

V. IMPLEMENTATION

It is requested that the amendment authorizing this change become effective upon issuance and shall be implemented within thirty days of receipt.