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May 24, 1995
C311-95-2099

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Three Mile Island Nuclear Generating Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Facility Operating License Amendment Request No. 250

In accordance with 10 CFR 50.4 (b)(1), enclosed is one (1) original copy of the Facility Operating License Amendment Request No. 250.

Also enclosed is one signed copy of the Certificate of Service for this request which confirms service to the senior officials of the township and county in which the facility is located, as well as the Commonwealth of Pennsylvania, Bureau of Radiation Protection.

The purpose of this license amendment request is to change the surveillance "Test" requirements for the source-range Nuclear Instrumentation. New instruments, manufactured by GAMMA-METRICS Inc., and installed during the 7R refueling outage have been found to exhibit very little instrument drift in operation and by tests conducted since installation. Therefore, this change eliminates the potential for unnecessary testing, which could result if the requirement is not revised.

It is requested that the license amendment be issued prior to the restart from refueling outage 11R, presently scheduled for September, 1995.

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PDR ADOCK 05000289
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Sincerely,

T. G. Broughton
Vice President/Director, TMI

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314-95-2099

Enclosures: 1) Facility Operating License Amendment Request No. 250
2) Certificate of Service for the Facility Operating License Request No. 250

cc: TMI-1 Senior Project Manager
Region I Administrator
TMI Senior Resident Inspector

Operating License No. DPR-50
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Notarial Seal
Melody Kim Kulp, Notary Public
Londonderry Twp., Dauphin County
My Commission Expires Aug. 21, 1997
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 the Facility Operating License Amendment Request is submitted in support of Licensee's request to change the Operating License No. DPR-50 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 Supervisors of
Londonderry Township
R. D. #1, Geyers Church Road
Middletown, PA 17057

Mr. Russell L. Sheaffer, Chairman
Board of County Commissioners
of Dauphin County
Dauphin County Courthouse
Harrisburg, PA 17120

Director, Bureau of Radiation Protection
PA Dept. of Environmental Resources
P.O. Box 2063
Harrisburg, PA 17120
Att: Mr. Robert Barkanic

GPU NUCLEAR CORPORATION

BY: *J. B. Brangsten*
Vice President/Director, TMI

DATE: May 24, 1995

ENCLOSURE

**Three Mile Island Nuclear Plant, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
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I. PROPOSED TECHNICAL SPECIFICATION CHANGE REQUEST (TSCR)

GPU Nuclear (GPUN) Corporation hereby requests that the following pages of the TMI-1 Technical Specifications (Tech. Specs.) be replaced as indicated below:

Replace Pages: 1-8 and 4-3.

II. BACKGROUND AND DESCRIPTION OF CHANGES

Background:

Nuclear Instrumentation channels include redundant GAMMA-METRICS Inc. analog instrument loops each of which provides source range and wide-range reactor neutron flux monitoring. Each loop consists of: two (2) fission chambers in a neutron detector tube in close proximity to the reactor vessel; a qualified, low noise triaxial cable; and, pre-amplifier and signal conditioning instruments. The testing requirements for these instruments are contained in TMI-1 Technical Specifications Table 4.1-1, where Item 6 requires a "Test" of the Source Range Channel seven (7) days prior to any reactor startup. The same nuclear instrumentation channels also serve as wide-range neutron monitors for Post Accident Monitoring Instrumentation. Technical Specifications Table 4.1-4, Item 6, requires a calibration of these instruments on the basis of a surveillance interval not to exceed 24 months. These nuclear instrumentation channels also provide a control rod withdrawal inhibit interlock, control room displays and alarms.

These GAMMA-METRICS Inc. instruments were installed during refueling outage 7R and have been found to exhibit very little instrument drift in operation and by tests conducted during refueling outages 8R, 9R, and 10R.

Description of Changes

1. p. 1-8 Revision of the Frequency Notation Table 1.2, which is part of Tech. Spec. Definition 1.25, with the incorporation of a new six months prior to startup requirement.

Three Mile Island Nuclear Plant, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Facility Operating License Amendment Request No. 250

2. p. 4-3 Tech. Spec. Table 4.1-1, "Instrument Surveillance Requirements," has been revised to reflect new Test frequency for the Source Range Channel, Item No. 6 on the table, by deletion of the seven (7) days prior to startup (P S/U) notation and replacement with the requirement to Test within six (6) months prior to each reactor startup.

III. SAFETY EVALUATION JUSTIFYING CHANGE

The safety functions and requirements for Nuclear Instrumentation are specified in the TMI-1 Technical Specifications: (a) Section 3.5.1 "Operational Safety Instrumentation"; (b) Section 3.5.5, "Accident Monitoring Instrumentation"; and, (c) Section 3.8, "Fuel Loading and Refueling."

(a) Tech. Spec. 3.5.1.5 requires that, "During STARTUP when the intermediate range instruments come on scale, the overlap between intermediate range and source range shall not be less than one decade." The Nuclear Instrumentation source-range instruments provide indication of reactor power during reactor startup until reactor power has increased to the point where the intermediate-range nuclear instruments are on scale. This TSCR eliminates the seven-day test of source-range nuclear instrumentation and replaces this requirement with a requirement to test these NI channels within six (6) months prior to each reactor startup. The manufacturer GAMMA-METRICS, Inc. has specified that this equipment exhibits a maximum drift rate of $\pm 0.5\%$ of span over six months.

(b) Tech. Spec. 3.5.5 Bases states: "The operability of design basis accident monitoring instrumentation as identified in Table 3.5-3, ensures that sufficient information is available on selected plant parameters to monitor and assess the variables following an accident." The wide-range nuclear instruments channels provide post-accident monitoring of reactor power. The current surveillance requirements are that a channel check be performed weekly and a calibration be performed on an interval not to exceed 24 months. This TSCR does not change surveillance requirements for the wide-range nuclear instrument channels.

(c) Tech. Spec. 3.8 Bases, states that, "Continuous monitoring of radiation levels and neutron flux provides immediate indication of an unsafe condition during refueling and fuel loading activities." Testing of the source-range channels six (6) months prior to a reactor restart is acceptable based on the 0.5% drift specified by the manufacturer, GAMMA-METRICS, Inc.

Three Mile Island Nuclear Plant, Unit 1 (TMI-1)
Operating License No. DPR-50
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IV. NO SIGNIFICANT HAZARDS CONSIDERATIONS

GPUN has determined that this Facility Operating License Amendment Request for TMI-1 involves no significant hazards consideration as defined by NRC in 10 CFR 50.92.

1. Operation of the facility in accordance with the proposed TSCR would not involve a significant increase in the probability of occurrence or the consequences of an accident previously evaluated.

The proposed revision to the Technical Specifications does not involve any physical changes to the plant, and it does not impact the safety analysis with respect to design basis events and assumptions. The only change proposed is in the "Test" frequency for source-range Nuclear Instrumentation by revision of the appropriate Tech. Spec. tables. The revised testing requirement has no impact upon the probability of occurrence or the consequences of any accident previously evaluated, because no credit is taken in the accident analyses for the source range monitors nor are there any inputs to the Reactor Protection System. Tech. Spec. 3.1.9.2 requires that the control rod withdraw inhibit be operable at all times; however, it is not affected by this change request. Additionally, no nuclear safety equipment or systems interface with source-range nuclear instrumentation, and operator ability to monitor and trend post-accident neutron level is not affected by the proposed change. Therefore, this change request will not increase the probability of occurrence or the consequences of any previously analyzed accidents as described in the Updated FSAR (UFSAR).

2. Operation of the facility in accordance with the proposed TSCR would not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed revision to the TMI-1 Technical Specifications does not involve any physical changes to the plant, and does not impact on the safety analysis with respect to design basis events and assumptions. The only change proposed is in the "Test" frequency for Nuclear Instrumentation by revision of the appropriate Tech. Spec. tables. No nuclear safety equipment or systems interface with the source-range nuclear instrumentation, and operator ability to monitor and trend post-accident neutron levels is not adversely affected by the proposed change. In addition, the source-range nuclear instrument channels provide indication to the control room, plant computer and one of two channels provides input to Remote Shutdown Panel B.

Three Mile Island Nuclear Plant, Unit 1 (TMI-1)
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The 0.5% instrument drift over a six (6) month period will not affect the ability to operate other safety equipment; nor, will it increase the probability of failure of the rod withdrawal inhibit. The inhibit function is triggered by a startup rate, and a 0.5% drift over six (6) months will not affect the instrument's ability to perform the inhibit function. Therefore, this change has no impact upon the possibility of creating a new or different kind of accident from any previously evaluated in the UFSAR.

3. Operation of the facility in accordance with the proposed TSCR would not involve a significant reduction in a margin of safety.

The proposed revision to the TMI-1 Technical Specifications does not involve any physical changes to the plant, and does not impact on the safety analysis with respect to design basis events and assumptions. The only change proposed is in the surveillance frequency for Nuclear Instrumentation by revision of the appropriate Tech. Spec. tables. Startup rate instrumentation is not included in Technical Specifications 2.0, "Safety Limits"; and, hence, all system Limiting Conditions for Operation(s) remain unchanged. Testing of the source-range nuclear instrument channels within six (6) months prior to a reactor startup will not decrease the margin of safety. Hence, the margin of safety for the plant is not diminished by this change request.

The Commission has provided guidelines on the application of the three standards above, by listing specific examples in 48 FR 14870. The proposed amendment is considered to be in the same category as example (i) of amendments that are considered not likely to involve significant hazards considerations in that the proposed change is, in effect, of an administrative nature which involves the changing a surveillance interval maintained by plant procedure and does not involve any physical changes to the plant or materials, nor are any changes to normal plant operations. Therefore, operation of TMI-1 in accordance with the proposed TSCR involves no significant hazards considerations.

V. IMPLEMENTATION

It is requested that this license amendment become effective prior to the restart from refueling outage 11R, presently scheduled for September, 1995.