

December 13, 1993

Docket No. 50-289

Mr. T. Gary Broughton, Vice President  
and Director - TMI-1  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Distribution:

Docket File	CGrimes
NRC & Local PDRs	DHagan
PD I-4 Plant	ACRS (10)
SVarga	OPA
JCalvo	OC/LFDCB
SNorris	JFRogge, RI
OGC	GHill(2)

Dear Mr. Broughton:

SUBJECT: ISSUANCE OF AMENDMENT - TSCR NO. 235 (TAC NO. M87764)

The Commission has issued the enclosed Amendment No. 179 to Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1), in response to your letter dated September 20, 1993, as supplemented on October 1, 1993. The October 1 supplement supplied only corrected replacement Technical Specifications (TS) pages and did not alter the technical aspects of the original request.

The amendment revises the plant TS to reflect a partial GPU Nuclear reorganization to become effective when Three Mile Island, Unit 2 (TMI-2), enters the Post-Defueling Monitored Storage (PDMS) mode. This reorganization includes combining the TMI-2 Division with the TMI-1 Division (organizationally only) into a new organization called the TMI Division and incorporating those functions and responsibilities required to maintain TMI-2 in the PDMS condition. In addition to the change associated with the PDMS-related reorganization, some obsolete organizational titles are updated.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by  
Ronald W. Hernan, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

150022

Enclosures:

1. Amendment No. 179 to DPR-50
2. Safety Evaluation

cc w/enclosures:

See next page

\*See previous concurrence

OFFICE	LA:PDI-4	PM:PDI-4	D:PDI-4	OGC	BC:HHFB
NAME	SNorris* <i>RWH for</i>	RHernan:cn*	JStolz*	<i>CPW</i>	<i>ZJP.</i>
DATE	11/19/93	11/19/93	11/19/93	12/16/93	12/18/93

OFFICIAL RECORD COPY

Document Name: G:\HERNAN\M87764.AMD

9312200052 931213  
PDR ADOCK 05000289  
P PDR

NRC FILE CENTER COPY

DFo1  
11v  
CP



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 13, 1993

Docket No. 50-289

Mr. T. Gary Broughton, Vice President  
and Director - TMI-1  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Dear Mr. Broughton:

SUBJECT: ISSUANCE OF AMENDMENT - TSCR NO. 235 (TAC NO. M87764)

The Commission has issued the enclosed Amendment No. 179 to Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1), in response to your letter dated September 20, 1993, as supplemented on October 1, 1993. The October 1 supplement supplied only corrected replacement Technical Specifications (TS) pages and did not alter the technical aspects of the original request.

The amendment revises the plant TS to reflect a partial GPU Nuclear reorganization to become effective when Three Mile Island, Unit 2 (TMI-2), enters the Post-Defueling Monitored Storage (PDMS) mode. This reorganization includes combining the TMI-2 Division with the TMI-1 Division (organizationally only) into a new organization called the TMI Division and incorporating those functions and responsibilities required to maintain TMI-2 in the PDMS condition. In addition to the change associated with the PDMS-related reorganization, some obsolete organizational titles are updated.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

A handwritten signature in black ink that reads "Ronald W. Hernan" with a long horizontal flourish extending to the right.

Ronald W. Hernan, Senior Project Manager  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 179 to DPR-50
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. T. Gary Broughton  
GPU Nuclear Corporation

Three Mile Island Nuclear Station,  
Unit No. 1

cc:

Michael Ross  
O&M Director, TMI-1  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Michele G. Evans  
Senior Resident Inspector (TMI-1)  
U.S. Nuclear Regulatory Commission  
Post Office Box 311  
Middletown, Pennsylvania 17057

Michael Laggart  
Manager, Licensing  
GPU Nuclear Corporation  
100 Interpace Parkway  
Parsippany, New Jersey 07054

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Adam W. Miller  
Acting TMI Licensing Manager  
GPU Nuclear Corporation  
Post Office Box 480  
Middletown, Pennsylvania 17057

Robert B. Borsum  
B&W Nuclear Technologies  
Suite 525  
1700 Rockville Pike  
Rockville, Maryland 20852

Ernest L. Blake, Jr., Esquire  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, NW.  
Washington, DC 20037

William Dornsife, Acting Director  
Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Resources  
Post Office Box 2063  
Harrisburg, Pennsylvania 17120

Chairman  
Board of County Commissioners  
of Dauphin County  
Dauphin County Courthouse  
Harrisburg, Pennsylvania 17120

Chairman  
Board of Supervisors  
of Londonderry Township  
R.D. #1, Geyers Church Road  
Middletown, Pennsylvania 17057



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER & LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 179  
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by GPU Nuclear Corporation, et al. (the licensee), dated September 20, 1993, as supplemented on October 1, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

9312200057 931213  
PDR ADOCK 05000289  
P PDR

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 179, are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective at such time that TMI-2 has been declared to be in the Post-Defueling Monitored Storage (PDMS) mode and the Vice President - TMI has been delegated the full responsibility of the overall safe operation of both TMI-1 and TMI-2.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate I-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 13, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 179

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

<u>Remove</u>	<u>Insert</u>
3-35	3-35
4-55a	4-55a
4-55c	4-55c
5-55e	4-55e
4-55g	4-55g
4-60	4-60
6-1	6-1
6-4	6-4
6-5	6-5
6-9	6-9
6-10	6-10

### 3.5.2.5 Control Rod Positions

- a. Operating rod group overlap shall not exceed 25 percent  $\pm 5$  percent, between two sequential groups except for physics tests.
- b. Position limits are specified for regulating control rods. Except for physics tests or exercising control rods, the regulating control rod insertion/withdrawal limits are specified in the CORE OPERATING LIMITS REPORT. If any of these control rod position limits are exceeded, corrective measures shall be taken immediately to achieve an acceptable control rod position. Acceptable control rod positions shall be attained within four hours.
- c. Safety rod limits are given in 3.1.3.5.

3.5.2.6 The control rod drive patch panels shall be locked at all times with limited access to be authorized by the Director, Operations and Maintenance, TMI.

### 3.5.2.7 Axial Power Imbalance:

- a. Except for physics tests the axial power imbalance, as determined using the full incore system (FIS), shall not exceed the envelope defined in the CORE OPERATING LIMITS REPORT.

The FIS is operable for monitoring axial power imbalance provided the number of valid self powered neutron detector (SPND) signals in any one quadrant is not less than the limit in the CORE OPERATING LIMITS REPORT.

- b. When the full incore detector system is not OPERABLE and except for physics tests axial power imbalance, as determined using the power range channels (out of core detector system)(OCD), shall not exceed the envelope defined in the CORE OPERATING LIMITS REPORT.
- c. When neither detector system above is OPERABLE and, except for physics tests axial power imbalance, as determined using the minimum incore system (MIS), shall not exceed the envelope defined in the CORE OPERATING LIMITS REPORT.
- d. Except for physics tests if axial power imbalance exceeds the envelope, corrective measures (reduction of imbalance by APSR movements and/or reduction in reactor power) shall be taken to maintain operation within the envelope.

## Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once per refueling cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon shall be performed in accordance with approved test procedures. Replacement adsorbent should be qualified according to Regulatory Guide 1.52 March 1978. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable all adsorbent in the system shall be replaced. Tests of the HEPA filters with DOP aerosol shall also be performed in accordance with approved test procedures. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52 March 1978.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture built up on the adsorber.

If significant painting, steam, fire or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign materials, the same tests and sample analysis shall be performed as required for operational use. The determination of significance shall be made by the Director, Operations and Maintenance, TMI.

Demonstration of the automatic initiation of the recirculation mode of operation is necessary to assure system performance capability.

## Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once every refueling interval to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon refrigerant shall be performed in accordance with approved test procedures. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable all adsorbent in the system should be replaced with an adsorbent qualified according to Regulatory Guide 1.52, March 1978. Tests of the HEPA filters with DOP aerosol shall also be performed in accordance with approved test procedures. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52, March 1978.

Fans AH-E7A&B performance verification is necessary to ensure adequate flow to perform the filter surveillance of T.S. 4.12.2.1 and 4.12.2.3 and can only be demonstrated by running both fans simultaneously. This can only be accomplished when purge valves are not limited to 30° open (i.e., cold shutdown).

Since H<sub>2</sub> purge has been superseded by the installation of H<sub>2</sub> recombiners at TMI-I, the reactor building purge exhaust system no longer is relied upon to serve an operating accident mitigating (i.e. LOCA) function. The retest requirement of T.S. 4.12.2.2a has therefore been changed to reflect the same retest requirements as the auxiliary and fuel handling building ventilation system which similarly serves no operating accident mitigating function.

If significant painting, steam, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational use. The determination of significant shall be made by the Director, Operations and Maintenance, TMI.

## References

- (1) UFSAR, Section 5.6 - "Ventilation and Purge Systems"

## Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once every refueling interval to show system performance capability.

Tests and sample analysis assure that the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. The in-place test criteria and laboratory test criteria for activated charcoal will meet the guidelines of ANSI-N510-1980. If test results are unacceptable, all adsorbent in the system should be replaced with an adsorbent qualified according to Regulatory Guide 1.52, March 1978 or ANSI- N509-1980. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52, March 1978 or ANSI-N509-1980.

If significant painting, steam, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational use. The determination of what is significant shall be made by the Director, Operations and Maintenance, TMI.

Operation of the Auxiliary and Fuel Handling Building Exhaust Fans each month for at least ten (10) hours will demonstrate operability of the fans.

## Bases

The FHB ESF Air Treatment System is a system which is normally kept in a "standby" operating status. Tests and sample analysis assure that the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test procedure should allow for the removal of a sample from one adsorber test canister. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. The in-place test criteria and laboratory test criteria for activated charcoal will meet the guidelines of ANSI-N510-1980. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent qualified in accordance with ANSI-N509-1980. Any HEPA filters found defective will be replaced with filters qualified in accordance with ANSI-N509-1980.

Pressure drop across the entire filtration unit of less than 7.0 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture buildup on the adsorbers and HEPA filters.

If significant painting, steam, fire, or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational movement of irradiated fuel. The determination of what is significant shall be made by the Director, Operations and Maintenance, TMI.

4.17 SHOCK SUPPRESSORS (SNUBBERS)

SURVEILLANCE REQUIREMENTS

4.17.1 Each snubber shall be demonstrated OPERABLE by performance of the following inspection program.

a. Snubber Types

As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation and may be treated independently. The Radiological Controls/Safety Director, TMI, will ensure that a review is performed for ALARA considerations on all snubbers which are located in radiation areas for the determination of their accessibility. This review shall be in accordance with the recommendations of Regulatory Guides 8.8 and 8.10. The determination shall be based upon the known or projected radiation levels at each snubber location which would render the area inaccessible during reactor operation and based upon the expected time to perform the visual inspection. Snubbers may also be determined to be inaccessible because of their physical location due to an existing industrial safety hazard at the specific snubber location. This determination shall be reviewed and approved by the Industrial Safety & Health Manager.

Snubbers accessible during reactor operation shall be inspected in accordance with the schedule stated below. Snubbers scheduled for inspection that are inaccessible during reactor operation because of physical location or radiation levels shall be inspected during the next reactor shutdown greater than 48 hours where access is restored\* unless previously inspected in accordance with the schedule stated below.

Visual inspections shall include all safety related snubbers and shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers of Each Type per Inspection Period</u>	<u>Subsequent Visual Inspection Period**#</u>
0	24 months ± 25%
1	16 months ± 25%
2	6 months ± 25%
3, 4	124 days ± 25%
5, 6, 7	62 days ± 25%
8 or more	31 days ± 25%

\* Snubbers may continue to be inaccessible during reactor shutdown greater than 48 hours (e.g. if purging of the reactor building is not permitted).

\*\* The inspection interval for each type of snubber shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found.

# The provisions of Table 1.2 are not applicable.

6. ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

- 6.1.1 The Vice President - TMI shall be responsible for TMI-1 and TMI-2 operations and may, at any time, delegate his responsibilities in writing to the Director, Operations and Maintenance, TMI. He shall delegate the succession of his responsibilities in writing during his absence.
- 6.1.2 The Shift Supervisor (or during his absence from the Control Room, a designated individual), shall be responsible for the Control Room command function. A management directive to this effect signed by the President - GPUNC shall be reissued to all unit personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 CORPORATE

- 6.2.1.1 An onsite and offsite organization shall be established for unit operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.
- 6.2.1.2 Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational charts. These organizational charts will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.
- 6.2.1.3 The President-GPUNC shall have corporate responsibility for overall plant nuclear safety and shall take measures to ensure acceptable performance of the staff in operating, maintaining, and providing technical support so that continued nuclear safety is assured.

6.2.2 UNIT STAFF

- 6.2.2.1 The Vice President-TMI shall be responsible for overall site safe operation and shall have control over those on site activities necessary for safe operation and maintenance of the site.
- 6.2.2.2 The unit staff organization shall meet the following:
- a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
  - b. At least one licensed Reactor Operator shall be present in the control room when fuel is in the reactor.

## ACTIVITIES

- 6.5.1.1 Each procedure required by Technical Specification 6.8 and other procedures which affect nuclear safety, and substantive changes thereto, shall be prepared by a designated individual(s)/group knowledgeable in the area affected by the procedure. Each such procedure, and substantive changes thereto, shall be reviewed for adequacy by an individual(s)/group other than the preparer, but who may be from the same organization as the individual who prepared the procedure or change.
- 6.5.1.2 Proposed changes to the Appendix "A" Technical Specifications shall be reviewed by a knowledgeable individual(s)/group other than the individual(s) group who prepared the change.
- 6.5.1.3 Proposed modifications that affect nuclear safety to unit structures, systems and components shall be designed by an individual/organization knowledgeable in the areas affected by the proposed modification. Each such modification shall be reviewed by an individual/group other than the individual/group which designed the modification but may be from the same division as the individual who designed the modification.
- 6.5.1.4 Proposed tests and experiments that affect nuclear safety shall be reviewed by a knowledgeable individual(s)/group other than the preparer but who may be from the same division as the individual who prepared the tests and experiments.
- 6.5.1.5 Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, shall be reviewed by a knowledgeable individual(s)/group other than the individual/group which performed the investigation.
- 6.5.1.6 All REPORTABLE EVENTS shall be reviewed by an individual/group other than the individual/group which prepared the report.
- 6.5.1.7 Special reviews, investigations or analyses and reports thereon as requested by the Vice President TMI shall be performed by a knowledgeable individual(s)/group.
- 6.5.1.8 The Security Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.

- 6.5.1.9 The Emergency Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.
- 6.5.1.10 A knowledgeable individual(s)/group shall review every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports to the Vice President TMI covering evaluations, recommendations and disposition of the corrective action to prevent recurrence.
- 6.5.1.11 Major changes to radwaste systems shall be reviewed by a knowledgeable individual(s)/group other than the individuals(s)/group which prepared them.
- 6.5.1.12 Individuals responsible for reviews performed in accordance with 6.5.1.1 through 6.5.1.4 shall include a determination of whether or not additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by the appropriate personnel. Individuals responsible for reviews considered under 6.5.1.1 through 6.5.1.5 shall render determinations in writing with regard to whether or not 6.5.1.1 through 6.5.1.5 constitute an unreviewed safety question.

#### RECORDS

- 6.5.1.13 Written records of activities performed under Specifications 6.5.1.1 through 6.5.1.11 shall be maintained.

#### QUALIFICATIONS

- 6.5.1.14 Responsible Technical Reviewers shall meet or exceed the qualifications of ANSI/ANS 3.1 of 1978 Section 4.6, or 4.4 for applicable disciplines, or have 7 years of appropriate experience in the field of his specialty. Credit toward experience will be given for advanced degrees on a one-to-one basis up to a maximum of two years. Responsible Technical Reviewers shall be designated in writing.

#### 6.5.2 INDEPENDENT SAFETY REVIEW FUNCTION

- 6.5.2.1 The Vice President of each division within GPU Nuclear Corporation shall be responsible for ensuring the independent safety review of the subjects described in 6.5.2.5 within his assigned area of safety review responsibility, as assigned in the GPUN Review and Approval Matrix.
- 6.5.2.2 Independent safety review shall be completed by an individual/group not having direct responsibility for the performance of the activities under review, but who may be from the same functionally cognizant organization as the individual/group performing the original work.
- 6.5.2.3 GPU Nuclear Corporation shall collectively have or have access to the experience and competence required to independently review subjects in the following areas:

## FUNCTION

- 6.5.4.3 The periodic review functions of the IOSRG shall include the following on a selective and overview basis:
- 1) Evaluation for technical adequacy and clarity of procedures important to the safe operation of the unit.
  - 2) Evaluation of unit operations from a safety perspective.
  - 3) Assessment of unit nuclear safety programs.
  - 4) Assessment of the unit performance regarding conformance to requirements related to safety.
  - 5) Any other matter involving safe operations of the nuclear power plant that the onsite IOSRG manager deems appropriate for consideration.

## AUTHORITY

- 6.5.4.4 The IOSRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the IOSRG shall provide recommendations to the management positions responsible for the areas reviewed.

## QUALIFICATIONS

- 6.5.4.5 The IOSRG engineers shall have either: (1) a Bachelor's Degree in Engineering or the Physical Sciences and three years of professional level experience in the nuclear power field including technical supporting functions, or (2) eight years of appropriate experience in nuclear power plant operations and/or technology. Credit toward experience will be given for advance degrees on a one-to-one basis up to a maximum of two years.

## RECORDS

- 6.5.4.6 Reports of evaluations and assessments encompassed in Section 6.5.4.3 shall be prepared, approved, and transmitted to the director and the division vice president responsible for nuclear safety assessment, the Vice President-TMI, and the management positions responsible for the areas reviewed.

## 6.6 REPORTABLE EVENT ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE EVENTS:
- a. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50, and
  - b. Each REPORTABLE EVENT shall undergo an independent safety review pursuant to Specification 6.5.2.5.d.

## 6.7 SAFETY LIMIT VIOLATION

- 6.7.1 The following actions shall be taken in the event a safety limit is violated:
- a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.
  - b. An immediate report shall be made to the Director, Operations and Maintenance, and Vice President TMI, and the event shall be reported to NRC in accordance with 10 CFR 50.72.
  - c. A complete analysis of the circumstances leading up to and resulting from the occurrence shall be prepared by the unit staff. This report shall include analysis of the effects of the occurrence and recommendations concerning operation of the unit and prevention of recurrence. This report shall be submitted to the Director Operations and Maintenance and the Vice President, TMI. The safety limit violation report shall be submitted to NRC in accordance with 10 CFR 50.73.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY  
JERSEY CENTRAL POWER & LIGHT COMPANY  
PENNSYLVANIA ELECTRIC COMPANY  
GPU NUCLEAR CORPORATION

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

1.0 BACKGROUND

By letter dated September 20, 1993, as supplemented on October 1, 1993, GPU Nuclear Corporation (GPUN/licensee), submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for changes to the Three Mile Island Nuclear Station, Unit No. 1 (TMI-1) Technical Specifications (TS). The amendment revises the plant TS to reflect a partial GPU Nuclear reorganization to become effective when Three Mile Island, Unit 2 (TMI-2), enters the Post-Defueling Monitored Storage (PDMS) mode. This reorganization includes deleting TMI-2 as a Division and incorporating those functions and responsibilities required to maintain the PDMS condition and requirements into the current TMI-1 Division to form a new combined organization named the TMI Division. In addition to the change associated with the PDMS-related reorganization, some obsolete organizational titles are updated. The October 1, 1993, submittal provided clarifying and corrected TS pages which did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Following cleanup from the March 28, 1979, accident at TMI-2, GPUN made a decision to place TMI-2 in a PDMS mode rather than either restore the plant to operation or decommission the plant. To coincide with establishing PDMS, GPUN will slightly alter the organization by combining the TMI-1 and TMI-2 organizations into one organization. During recovery from the accident, and prior to authorizing restart of TMI-1 in 1985, the Commission went to extraordinary lengths to keep the cleanup at Unit 2 from affecting safe operation of Unit 1. Therefore, a separate line organization was established for each unit, called the TMI-1 Division and the TMI-2 Division, each unit having its own separate line management organization. Each of the two Divisions had its own Vice President and Director reporting directly to the GPUN President and Chief Executive Officer. Once in the PDMS mode, there will be very little activity at TMI-2. Maintaining a separate organizational component solely for Unit 2 activities would not be justified from a cost standpoint and, in the opinion of the licensee, assigning responsibility of TMI-2 activities to the current TMI-1 organization would not create unnecessary diversion for management and operation of TMI-1. During recent years, the licensee has combined the Radiological Control and

Security groups from TMI-1 and TMI-2 into single organizations. The licensee plans to assign one individual to the newly created position of PDMS Manager. The PDMS Manager will be responsible for coordinating all TMI-2 activities and will report directly to the TMI Director of Operations and Maintenance (one level below the TMI Site Director) and will have no responsibilities other than maintaining TMI-2 in the PDMS mode.

As part of the shift in responsibility for monitoring activities at TMI-2 to TMI-1 personnel, the licensee has installed a remote alarm monitoring system that allows key TMI-2 parameters to alarm in the TMI-1 control room. The alarm windows (backlights) are color-coded in such a manner as to distinguish Unit 1 alarms from Unit 2 alarms. The TMI-1 Shift Supervisor and his crew will maintain cognizance of the TMI-2 status including taking routine log readings and responding to alarms. The PDMS Manager will have only the responsibility of operation and maintenance activities at TMI-2 and will normally schedule these activities during daylight hours when he/she and his/her staff are onsite and available. The minor additional responsibilities assumed by the TMI-1 staff should not affect the organizational characteristics identified in the TMI-1 TS. Amendment No. 139 to the TMI-1 TS removed organization charts from the TS in lieu of maintaining general requirements that capture the essential aspects of the organizational structure that are defined by existing onsite and offsite organization charts. The amendment proposed in the licensee's current request would not change the TS descriptions of the essential aspects of the organizational structure but would merely change certain job titles and reflect the additional TMI-2 responsibilities for the Site Director (Vice President - TMI) and the Operations and Maintenance Director.

The staff has reviewed these proposed changes to the TMI-1 TS and finds that the safety significance of the changes is negligible and that the intent of Regulatory Guide 1.8, "Personnel Selection and Training," has been preserved. Therefore, the staff finds the proposed changes acceptable. The staff also recognizes that the actual organizational changes will take place over a transitional period of several weeks. Therefore, effectiveness of the proposed amendment would not be until the end of the transition period when TMI-2 has been declared to be in the PDMS mode and the Vice President - TMI has been delegated the full responsibility of the overall safe operation of both TMI-1 and TMI-2.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R. W. Hernan

Date: December 13, 1993