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Mr. Henry D. Hukill, Vice President
and Director - TMI-1
GPU Nuclear Corporation
P. O. Box 480
Middletown, Pennsylvania 17057

Dear Mr. Hukill:

The Commission has issued the enclosed Amendment No. 77 to Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit No. 1. This amendment consists of changes to the Technical Specifications in a partial response to your application dated April 10, 1981, as supplemented August 13, 1981 and November 25, 1981.

This amendment revises the Administrative Controls Section of the Technical Specifications to reflect major changes in the GPU Nuclear Corporation organization and internal safety review process.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

*ORIGINAL SIGNED BY
JOHN F. STOLZ*

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:
1. Amendment No 77 to DPR-50
2. Safety Evaluation
3. Notice

cc w/enclosures:
See next page

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OFFICE	ORB#4:DL	ORB#4:DL	C-ORB#4:DL	AD/OR:DL	OELD		
SURNAME	RIngram	RJacobs/cb	JStolz	TNovak			
DATE	3/ /82	3/ /82	3/ /82	3/ /82	3/13/82		

see note Jacobs

Subject to F.R. Notice Change

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

APR 28 1982

Judge Gary J. Edles, Chairman
Atomic Safety & Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Judge Christine N. Kohl
Atomic Safety & Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Judge John H. Buck
Atomic Safety & Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

In the Matter of
METROPOLITAN EDISON COMPANY, ET AL.
(Three Mile Island, Unit 1)
Docket No. 50-289

Dear Members of the Board:

This letter is to advise you that the Staff has issued an amendment to Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit No. 1 (TMI-1). The amendment consists of revisions to the Administrative Controls Section of the Technical Specifications to reflect major changes in the GPU Nuclear Corporation organization and internal safety review process. A copy of the amendment and the Staff's supporting Safety Evaluation is enclosed for your information.

The GPU Nuclear Corporation organization and internal safety review process involve matters that are issues in the TMI-1 restart proceeding and that have been considered by the Atomic Safety and Licensing Board in the hearing concerning the restart of TMI-1. However, since the Technical Specifications imposed by this amendment are consistent with the Licensing Board's August 27, 1981, Partial Initial Decision on Management Issues and will result in improved requirements and an increase in the level of safety, both prior to and after restart, relative to the requirements of the existing Technical Specifications, the Staff has concluded that the issuance of this amendment is appropriate at this time, during the shutdown of TMI-1. This will allow the efficient development and finalization of procedures for implementing the new Technical Specifications now, prior to the return to operation of TMI-1, if, in fact, TMI-1 restart is eventually authorized. Of course, the

OFFICE ▶							
SURNAME ▶							
DATE ▶							

requirements imposed by this amendment will be subject to the modification by the Board as a result of its further decision in the restart proceeding.

Sincerely,

Original signed by

Jack R. Goldberg
Counsel for NRC Staff

Enclosure as stated

cc (w/encl.): Service List

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DATE	4/22/82	4/22/82					

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cc w/enclosure(s) & incoming dtd.:
4/10, 8/13 & 11/25/81 -----

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

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER AND 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. 77
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Metropolitan Edison Company, et al. (the licensees), dated April 10, 1981, as supplemented August 13, 1981, and November 25, 1981, 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.

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 Appendices A and B, as revised through Amendment No. 77 , are hereby incorporated in the license. The GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment becomes effective 4 months after its date of issuance or upon reactor initial criticality following authorization to restart, whichever occurs first.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 28, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 77

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

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

*Remove	Insert
v	v
viii	viii
6-1 - 6-27	6-1 - 6-24
	Fig. 6-1
	Fig. 6-2

*Changes on the revised TS pages do not become effective for 4 months after the date of issuance or upon reactor initial criticality following authorization to restart, whichever occurs first. In the interim, the existing TS pages are in effect and should be retained.

TABLE OF CONTENTS

LIST OF FIGURES

6 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Vice President - TMI-1 shall be responsible for unit operations and may, at any time, delegate his responsibilities in writing to the Operations and Maintenance Director, TMI-1. 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

CORPORATE

6.2.1 The organization of the GPU Nuclear Corporation (GPUNC) for management and technical support shall be functionally as shown in Figure 6-1.

UNIT STAFF

6.2.2 The organization within the unit for management, operations, technical support, and maintenance shall be functionally as shown in Figure 6-2.

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.

c. At least two licensed Reactor Operators shall be present in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips.

d. The Shift Supervisor or Shift Foreman# shall be in the control room at all times other than cold shutdown conditions (T average $< 200^{\circ}$ F) when he shall be onsite.

e. An individual## qualified pursuant to 6.3.2 in radiation protection procedures shall be on site when fuel is in the reactor.

f. A licensed Senior Reactor Operator with no other concurrent operational duties shall directly supervise: (a) irradiated fuel handling and transfer activities onsite, and (b) all unirradiated fuel handling and transfer activities to and from the Reactor Vessel.

If not SRO licensed, he shall have completed the SRO Training Program.

The individual of item 6.2.2e and the Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

Amendment No. 77

FIGURE 6-1

ORGANIZATION CHART

GPU NUCLEAR CORPORATION

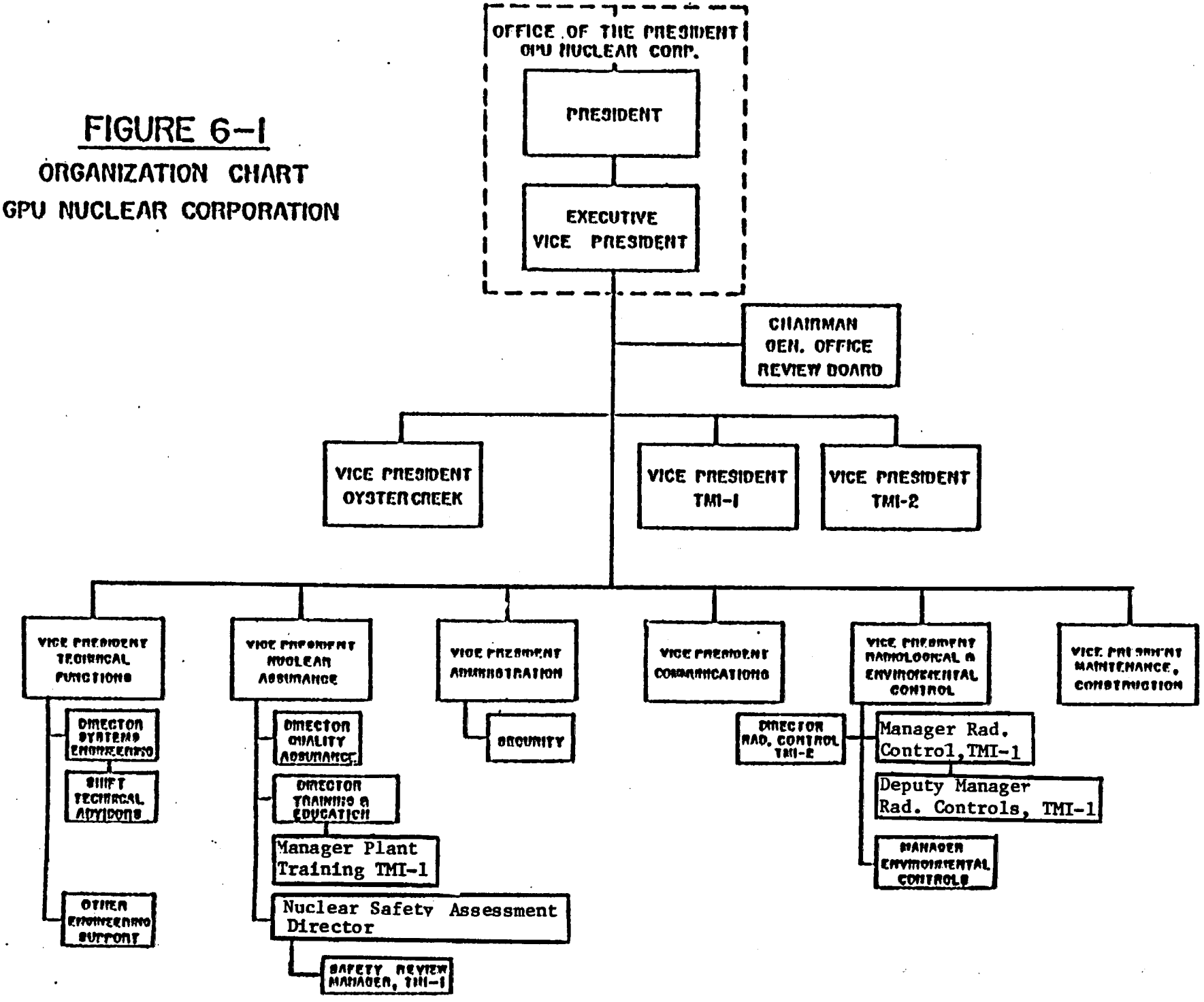


TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION***

LICENSE CATEGORY QUALIFICATIONS	Tave > 200°	Tave ≤ 200°
SRO	1	1*
RO	3****	1
Non-Licensed Auxiliary Operator	2	1
Shift Technical Advisor	1**	None Required

*Does not include the Licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising (a) irradiated fuel handling and transfer activities onsite, and (b) all unirradiated fuel handling and transfer activities to and from the Reactor Vessel.

**May be on a different shift rotation than licensed personnel.

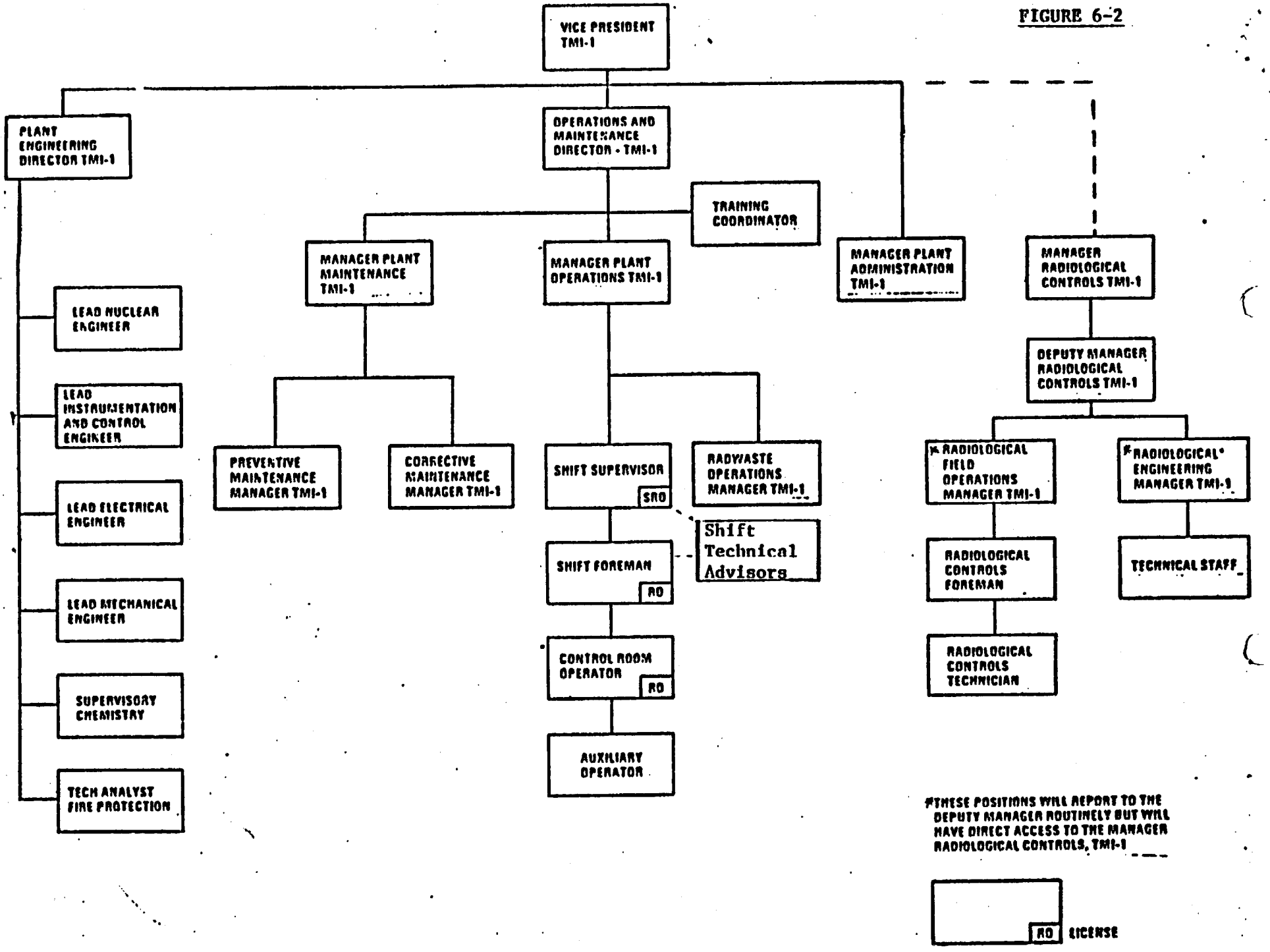
***Except for the Shift Supervisor, shift crew composition may be one less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an incoming shift crewman being late or absent.

****Includes the Shift Foreman, who is either SRO licensed or RO licensed and has completed the SRO training program.

Amendment No. ~~11~~, ~~32~~, 77

TMI-1 Unit Staff

FIGURE 6-2



g. A Site Fire Brigade of at least 5 members shall be maintained onsite at all times. The Site Fire Brigade shall not include members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.

h. The Shift Technical Advisor shall serve in an advisory capacity to the Shift Supervisor on matters pertaining to the engineering aspects assuring safe operation of the unit.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications. Licensed operators shall meet the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees. Individuals who do not meet ANSI/ANS 3.1 of 1978 Section 4.5 are not considered technicians or maintenance personnel for purposes of determining qualifications but are permitted to perform work for which qualification has been demonstrated.

6.3.2 The Manager-Radiological Controls or the Deputy shall meet or exceed the qualifications of Regulatory Guide 1.8 of 1977. Each Radiological Controls Technician/Foreman shall meet or exceed the qualifications of ANSI-N 18.1-1971, paragraph 4.5.2/ 4.3.2 or be formally qualified through an NRC approved TMI-1 Radiation Controls training program. All Radiological Controls Technicians will be qualified through training and examination in each area or specific task related to their radiological controls functions prior to their performance of those tasks.

6.3.3 The Shift Technical Advisors shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in unit design, response and analysis of transients and accidents.

6.4. TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Manager Plant Training - TMI-1 and shall meet or exceed the requirements and recommendations of Regulatory Guide 1.8 of 1977 and Appendix "A" of 10CFR Part 55 except that Radiological Controls training may be under the direction of the Vice President - Radiological and Environmental Controls. Licensed operators shall meet the supplemental requirement specified in Section A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Manager Plant Training - TMI-1 and shall meet or exceed the requirements of Section 27 of the NFPA Code - 1976.

6.5 REVIEW AND AUDIT

6.5.1 TECHNICAL REVIEW AND CONTROL

The Vice President of each division within GPU Nuclear Corporation as indicated in Figure 6-1, shall be responsible for ensuring the preparation, review, and approval of documents required by the activities described in 6.5.1.1 through 6.5.1.5 within his functional area of responsibility as assigned in the GPUN Review and Approval Matrix. Implementing approvals shall be performed at the cognizant manager level or above.

ACTIVITIES

6.5.1.1 Each procedure required by Technical Specification 6.8 and other procedures including those for tests and experiments which are important to safety, and changes thereto which are important to safety, shall be prepared by a designated individual(s)/group knowledgeable in the area affected by the procedure. Each such procedure, and change 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 to unit structures, systems and components important to safety 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 are important to 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 Events requiring 24-hour written notification to the Commission 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-1 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-1 covering evaluation, 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 individuals(s)/group other than the individual(s)/ group which prepered 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 as indicated in Figure 6-1 shall be responsible for ensuring the periodic 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:

a. Nuclear power plant operations
b. Nuclear engineering
c. Chemistry and radiochemistry
d. Metallurgy
e. Nondestructive testing
f. Instrumentation and control
g. Radiological safety
h. Mechanical engineering
i. Electrical engineering
j. Administrative controls and quality assurance practices
k. Emergency plans and related organization, procedures and equipment
l. Other appropriate fields associated with the unique characteristics of TMI-1.

6.5.2.4 Consultants may be utilized as determined by the cognizant Vice-President to provide expert advice.

RESPONSIBILITIES

6.5.2.5 The following subjects shall be independently reviewed by the functionally assigned divisions:

a. Written safety evaluations of changes in the facility as described in the Safety Analysis Report, of changes in procedures as described in the Safety Analysis Report, and of tests or experiments not described in the Safety Analysis Report, which are completed without prior NRC approval under the provisions of 10CFR 50.59(a)(1). This review is to verify that such changes, tests or experiments did not involve a change in the Technical Specifications or an unreviewed safety question as defined in 10CFR 50.59(a)(2). Such reviews need not be performed prior to implementation.

b. Proposed changes in procedures, proposed changes in the facility, or proposed tests or experiments, any of which involves a change in the Technical Specifications or an unreviewed safety question as defined in 10CFR 50.59(c). Matters of this kind shall be reviewed prior to submittal to the NRC.

c. Proposed changes to Technical Specifications or license amendments related to nuclear safety shall be reviewed prior to submittal to the NRC for approval.

d. Violations, deviations, and reportable events which require reporting to the NRC in writing. Such reviews are performed after the fact. Review of events covered under this subsection shall include results of any investigations made and the recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

e. Written summaries of audit reports in the areas specified in section 6.5.3 and involving safety related functions.

f. Any other matters involving safe operation of the nuclear power plant which a reviewer deems appropriate for consideration, or which is referred to the Independent reviewers.

6.5.2.6 QUALIFICATIONS

The Independent reviewer(s) shall either have a Bachelor's Degree in Engineering or the Physical Sciences and five (5) years of professional level experience in the area being reviewed or have 9 years of appropriate experience in the field of his speciality. An individual performing reviews may possess competence in more than one specialty area.
Credit toward experience will be given for advanced degrees on a one-for-one basis up to a maximum of two years.

RECORDS

6.5.2.7 Reports of reviews encompassed in Section 6.5.2.5 shall be prepared, maintained and transmitted to the cognizant division Vice President.

6.5.3. AUDITS

6.5.3.1 Audits of unit activities shall be performed by the Quality Assurance Department in accordance with the TMI-1 Operational Quality Assurance Plan. These audits shall encompass:

a. The conformance of unit operations to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.

b. The performance, training and qualifications of the entire unit staff at least once per 12 months.

c. The verification of the non-conformances and corrective actions program to be properly implemented and documented as related to actions taken to correct deficiencies occurring in unit equipment, structures, systems or methods of operation that affect nuclear safety at least once per 6 months.

d. The performance of activities required by the Operational Quality Assurance Plan to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.

e. The Emergency Plan and implementing procedures at least once per 24 months.

f. The Security Plan and implementing procedures at least once per 24 months.

g. The Fire Protection Program and implementing procedures at least once per 24 months.

h. The Offsite Dose Calculation Manual and implementing proce-

dures at least once per 24 months.

i. The Process Control Program and implementing procedures for solidification of radioactive wastes at least once per 24 months.

j. The performance of activities required by the Quality Assurance Program to meet criteria of Regulatory Guide 4.15, December, 1977 at least once per 12 months.

k. Any other area of unit operation considered appropriate by the IOSRG or the Office of the President-GPUNC.

6.5.3.2 Audits of the following shall be performed under the cognizance of the Vice President - Technical Functions:

a. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.

b. An inspection and audit of the fire protection and loss prevention program, by an outside qualified fire consultant at intervals no greater than 3 years.

RECORDS

6.5.3.3 Audit reports encompassed by sections 6.5.3.1 and 6.5.3.2 shall be forwarded for action to the management positions responsible for the areas audited within 60 days after completion of the audit. Upper management shall be informed per the Operation Quality Assurance Plan.

6.5.4 INDEPENDENT ONSITE SAFETY REVIEW GROUP (IOSRG)

FUNCTION

6.5.4.1 The IOSRG shall be a full-time group of engineers, independent of the unit staff, and located onsite.

ORGANIZATION

6.5.4.2 The IOSRG shall consist of the Safety Review Manager and a minimum staff of 3 members, each of whom shall have an academic degree in engineering or a physical science field.

6.5.4.3 The IOSRG shall report to the Nuclear Safety Assessment Director.

6.5.4.4 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 safety programs.

4) Assessment of the unit performance regarding conformance to requirements related to safety.

5) Any other matter involving safe operation of the nuclear power plant that the Safety Review Manager deems appropriate for consideration.

AUTHORITY

6.5.4.5 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.

6.5.4.6 QUALIFICATIONS

The IOSRG engineers shall have a Bachelor's Degree in Engineering or the Physcial Sciences and three (3) years of professional level experience in the nuclear power field including technical supporting functions or 6 years of appropriate experience. Credit toward experience will be given for advance degrees on a one-to-one basis up to a maximum of two years.

RECORDS

6.5.4.7 Reports of evaluations and assessments encompassed in Section 6.5.4.4 shall be prepared, approved, and transmitted to the Nuclear Safety Assessment Director, division Vice President, and the management positions responsible for the areas reviewed.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken in the event of a reportable occurrence requiring prompt notification with written follow-up:

a. Each occurrence shall be reported immediately to the cognizant manager and the cognizant division Vice President and the Vice President TMI-1. The functionally cognizant division staff shall prepare a description of the occurrence, the cause of the occurrence and recommendations for appropriate corrective action to prevent or minimize the probability of a repetition of the occurrence. Copies of all such reports shall be submitted to the functionally cognizant division Vice President and the Vice President TMI-1.

b. The Nuclear Regulatory Commission shall be notified in accordance with the requirements of Technical Specification 6.9.2.A.

6.6.2 The following actions shall be taken in the event of a reportable occurrence requiring a thirty-day written report.

a. Each such occurrence shall be reported promptly to the cognizant manager and the cognizant Vice President and the Vice President TMI-1. A written report for each occurrence shall be prepared by the functionally cognizant division staff and shall include a description of the occurrence, the cause of the occurrence, and appropriate corrective action to prevent or minimize the probability of repetition of the occurrence. Copies of all such reports shall be submitted to the functionally cognizant division Vice President and the Vice-President TMI-1.

b. The Nuclear Regulatory Commission shall be notified in accordance with the requirements of Technical Specification 6.9.2.B.

6.7 OCCURRENCES INVOLVING A 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 shut down and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.

b. An immediate report shall be made to the Operations and Maintenance Director, and Vice President TMI-1, and the occurrence shall be promptly reported to the Nuclear Regulatory Commission in accordance with Technical Specification 6.9.2.A.

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 Operations and Maintenance Director and the Vice President TMI-1. Appropriate analysis of reports will be submitted to the Nuclear Regulatory Commission in accordance with Technical Specification 6.9.2.A.

6.8 PROCEDURES

6.8.1 Written procedures important to safety shall be established, implemented and maintained covering the items referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

b. Surveillance and test activities of equipment important to safety and radioactive waste management of equipment.

c. Refueling Operations.

d. Security Plan Implementation.

e. Fire Protection Program Implementation.

f. Emergency Plan Implementation.

g. Process Control Program Implementation.

h. Offsite Dose Calculation Manual Implementation.

i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 4.15.

6.8.2 Further, each procedure required by 6.8.1 above, and changes thereto which are important to safety, shall be reviewed and approved as described in 6.5.1 prior to implementation and shall be reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

a. The intent of the original procedure is not altered;

b. The change is approved by two members of GPUNC Management Staff authorized under Section 6.5.1.12 and knowledgeable in the area affected by the procedure. For changes which may affect the operational status of unit systems or equipment, at least one of these individuals shall be a member of unit management or supervision holding a Senior Reactor Operator's License on the unit.

c. The change is documented, reviewed and approved as described in 6.5.1.1 within 14 days of implementation.

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Administrator of the NRC Region 1 Office unless otherwise noted.

6.9.1 Routine Reports

A. Startup Report. A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described.

Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

B. Annual Reports. Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. (A single submittal may be made for the station. The submittal should combine those sections that are common to both units at the station.)

1. A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling). The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions. (This tabulation supplements the requirements of Section 20.407 of 10 CFR Part 20.)

2. The following information on aircraft movements at the Harrisburg International Airport:

   a. The total number of aircraft movements (takeoffs and landings) at the Harrisburg International Airport for the previous twelve-month period.

   b. The total number of movements of aircraft larger than 200,000 pounds, based on a current percentage estimate provided by the airport manager or his designee.

3. The following information from the periodic Leak Reduction Program tests shall be reported:

   a. Results of leakage measurements,
   b. Results of visual inspections, and
   c. Maintenance undertaken as a result of Leakage Reduction Program tests or inspections.

4. The following information regarding pressurizer power operated relief valve and pressurizer safety valve challenges shall be reported:

   a. Date and time of incident,
   b. Description of occurrence, and
   c. Corrective measures taken if incident resulted from an equipment failure.

C. Monthly Operating Reports. Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the U. S. Nuclear Regulatory Commission at the address specified in R.G. 10.1, no later than the fifteenth of each month following the calendar month covered by the report.

6.9.2 Reportable Occurrences

Reportable Occurrences, including corrective actions and measures to prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of an occurrence. In case of corrected or supplemental reports, reference shall be made to the original report date. (These reporting requirements apply only to Appendix A Technical Specifications.)

A. Prompt Notification With Written Follow-Up. The types of events listed below shall be reported as expeditiously as possible, but within 24 hours by telephone and confirmed by telegraph, mailgram, telecopy or facsimile transmission to the Administrator of the NRC Region 1 Office, or his designate no later than the first working day following the event, with a written

follow-up report within two weeks. The written follow-up report shall include material to provide complete explanation, cause of the event, the circumstances surrounding the event, any corrective action, and component failure data.

1. Failure of the reactor protection system or other systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the Technical Specifications or failure to complete the required protective function.

   Note: Instrument drift discovered as a result of testing need not be reported under this item but may be reportable under items 6.9.2.A.5, 6.9.2.A.6, or 6.9.2.B.1 below.

2. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition is less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications.

   Note: If specified action is taken when a system is found to be operating between the most conservative and the least conservative aspects of a limiting condition for operation listed in the Technical Specifications, the limiting condition for operation is not considered to have been violated and need not be reported under this item, but it may be reportable under item 6.9.2.B.2 below.

3. Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

   Note: Leakage of valve packing or gaskets within the limits for identified leakage set forth in the Technical Specifications need not be reported under this item.

4. Reactivity anomalies involving disagreement with the predicted value of reactivity balance under steady state conditions during power operation greater than or equal to 1% $\Delta k/k$; a calculated reactivity balance indicating a shutdown margin less conservative than specified in the Technical Specifications; short term reactivity increases that correspond to a reactor period of less than 5 seconds or, if sub-critical an unplanned reactivity insertion of more than 0.5% $\Delta k/k$; or occurrence of any unplanned criticality.

5. Failure or malfunction of one or more components which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems(s) used to cope with accidents analyzed in the FSAR.

6. Personnel error or procedural inadequacy which prevents or

could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the FSAR.

Note: For items 6.9.2.A.5 and 6.9.2.A.6 reduced redundancy that does not result in a loss of system function need not be reported under this section but may be reportable under items 6.9.2.B.2 and 6.9.2.B.3.

7. Conditions arising from natural or man-made events that, as a direct result of the event required plant shutdown, operation of safety systems, or other protective measures required by Technical Specifications.

8. Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the FSAR or in the bases for the Technical Specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the safety analyses.

9. Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the FSAR or Technical Specifications bases; or discovery during plant life of conditions not specifically considered in the FSAR or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

   Note: This item is intended to provide for reporting of potentially generic problems.

10. Failure or malfunction of the pressurizer power operated relief valve or pressurizer safety valves which prevents or could prevent, by itself, the fulfillment of the functional requirements of system(s) used to cope with accidents analyzed in the FSAR or as specified in the basis of Technical Specifications.

11. Offsite releases of radioactive materials in liquid and gaseous effluents which exceed the limits of Technical Specification 3.22.1.1 or 3.22.2.1.

12. Exceeding the limits in Technical Specification 3.22.2.6 for the storage of radioactive materials in the listed tanks.

B. Thirty Day Written Reports. The reportable occurrences discussed below shall be the subject of written reports to the Administrator of the NRC Region 1 Office within thirty days of occurrence of the event. The written report shall include narrative material to provide a complete explanation of the cause of the event, circumstances surrounding the event, any corrective action, and component failure data.

1. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the Technical Specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

2. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

Note: Routine surveillance testing, instrument calibration, or preventive maintenance which require system configurations as described in items 6.9.2.B.1 and 6.9.2.B.2 need not be reported except where test results themselves reveal a degraded mode as described above.

3. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.

4. Abnormal degradation of systems other than those specified in item 6.9.2.A.3. designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this item.

5. An unplanned offsite release of 1) more than 1 curie of radioactive material in liquid effluents, 2) more than 150 curies of noble gas in gaseous effluents, or 3) more than 0.05 curies of radioiodine in gaseous effluents.

6. Measured levels of radioactivity in an environmental sampling medium determined to exceed the reporting level values of Table 3.23-2 when averaged over any calendar quarter sampling period.

6.9.3 Unique Reporting Requirements

A. Special reports shall be submitted to the Regional Administrator of the NRC Region 1 Office within the time period specified for each report. These reports shall be submitted covering the activities identified below:

Tests	Submittal Dates
(1) Containment Structural Integrity Test - Tendon Surveillance Program	Within 3 months after performance of surveillance program.

(2) Steam Generator Tube Inspection Program (See Section 4.19.5)	Within 3 months after completion of inspection.
(3) Containment Integrated Leak Rate Test	Within 6 months after completion of test.
(4) Inservice Inspection Program	Within 6 months after five years of operation.
(5) Radioactive Sealed Source Leakage Test revealing the presence of ≥ 0.005 microcuries of Removable Contamination.	Within 90 days after completion of Test.

6.9.4 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Note: A single submittal may be made for the station. The submittal should combine those sections that are common to both units at the station however, for units with separate radwaste systems, the submittal shall specify the release of radioactive material from each unit.

5.9.4.1 Routine radiological environmental operating reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year.

6.9.4.2 The annual radiological environmental operating reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of the land use censuses required by Technical Specification 3.23.2. If harmful effects of evidence of irreversible damage are detected by the monitoring, the report shall provide an analysis of the problem and a planned course of action to alleviate the problem.

The annual radiological environmental operating reports shall include summarized and tabulated results in the format of the Radiological Assessment BTP on the REMP March 1978 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from one reactor; and the results of licensee participation in the

Interlaboratory Comparison Program, required by Technical Specification 3.23.3.

6.9.5 SemiAnnual Effluent Release Report

Note: A single submittal may be made for the station. The submittal should combine those sections that are common to both units at the station however; for units with separate radwaste systems, the submittal shall specify the release of radioactive material from each unit.

6.9.5.1 Routine radioactive effluent release reports covering the operations of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year.

6.9.5.2 The radioactive effluent release reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit as outlined in Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants", Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof.

The radioactive effluent release report to be submitted 60 days after January 1 of each year shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing of wind speed, wind direction, atmospheric stability, and precipitation (if measured) on magnetic tape, or in the form of joint frequency distribution of wind speed, wind direction, and atmospheric stability. This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 5-3 and 5-4) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in these reports. The meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents (as determined by sampling frequency and measurement) shall be used for determining the gaseous pathway doses. The assessment of radiation doses shall be performed in accordance with the Offsite Dose Calculation Manual (ODCM).

The radioactive effluent release report to be submitted 60 days after January 1 of each year shall also include an assessment of radiation doses to the likely most exposed real individual from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous 12 consecutive months to show conformance with 40 CFR 190 "Environmental Radiation Protection Standards for Nuclear Power Operation". Acceptable methods for calculating the dose contributions from liquid

and gaseous effluents are given in Regulatory Guide 1.21, Rev. 1.

The radioactive effluent release reports shall include the following information for each type of solid waste shipped offsite during the report period:

a. container volume,

b. total curie quantity (specify whether determined by measurement or estimate),

c. principal radionuclides (specify whether determined by measurement or estimate),

d. type of waste (e.g. spent resin , compacted dry waste, evaporator bottoms),

e. type of container (e.g., LSA, Type A, Type B, Large Quantity) and

f. solidification agent (e.g., cement, urea formaldehyde).

The radioactive effluent release reports shall include a summary of unplanned releases from the site to unrestricted areas of radioactive materials in gaseous and liquid effluents on a quarterly basis.

The radioactive effluent release reports shall include any changes to the Process Control Program (PCP) made during the reporting period.

Any changes to the Offsite Dose Calculation Manual shall be submitted with the next Semiannual Radioactive Effluent Report.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records of normal station operation including power levels and periods of operation at each power level.

b. Records of principal maintenance activities, including inspection, repairs, substitution, or replacement of principal items of equipment important to safety.

c. Records of reportable occurrences.

d. Records of periodic checks, tests and calibrations.

e. Records of reactor physics tests and other special tests important to safety.

f. Changes to operating procedures important to safety.

g. Records of solid radioactive shipments.

h. Test results, in units of microcuries, for leak tests performed on licensed sealed sources.

i. Results of annual physical inventory verifying accountability of licensed sources on record.

j. Control Room Log Book.

k. Shift Foreman Log Book.

6.10.2 The following records shall be retained for the duration of Operating License DPR-50.

a. Record and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Routine unit radiation surveys and monitoring records.

d. Records of radiation exposure history and radiation exposure status of personnel, including all contractors and unit visitors who enter radioactive material areas.

e. Records of radioactive liquid and gaseous wastes released to the environment, and records of environmental monitoring surveys.

f. Records of transient or operational cycles for those facility components important to safety for a limited number of transients or cycles as defined in the Final Safety Analysis Report.

g. Records of training and qualification for current members of the unit staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required by the Operational Quality Assurance Plan.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of reviews by the Independent Onsite Safety Review Group (previously Plant Operations Review Committee and General Office Review Board minutes).

l. Records of analyses required by the radiological environmental monitoring program.

m. Records of the service lives of all hydraulic snubbers listed on Table 3.16.1 including the date at which the service life commences and associated installation and maintenance records.

n. Records for Environmental Qualification which are covered under the provision of paragraph 6.15.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203 (c)(2) of 10 CFR 20:

a. Each High Radiation Area shall be barricaded and conspicuously posted as a High Radiation Area, and personnel desiring entrance shall obtain a Radiation Work Permit (RWP). Any individual entering a High Radiation Area shall (a) use a continuously indicating dose rate monitoring device or (b) use a radiation dose rate integrating device which alarms at a pre-set dose level, or (c) assure that a radiological control technician provides periodic radiation surveillance with a dose rate monitoring instrument.

b. Any area accessible to personnel where a major portion of the body could receive in any one hour a dose in excess of one thousand mrem shall be locked or guarded to prevent unauthorized entry. The keys to these locked barricades shall be maintained under the administrative control of the Radiological Controls Foreman on duty.

The Radiation Work Permit is not required by Radiological Controls personnel during the performance of their assigned radiation protection duties provided they are following radiological control procedures for entry into High Radiation Areas.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 The PCP shall be approved by the Commission prior to implementation.

6.13.2 GPU Nuclear Corporation initiated changes to the PCP:

1. Shall be submitted to the NRC in the Semiannual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:

   a. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;

   b. a determination that the changes did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.

2. Shall become effective upon review and approval by GPUNC Management.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 GPU Nuclear Corporation initiated changes to the ODCM:

1. Shall be submitted to the NRC in the Semiannual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:

   a. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;

   b. a determination that the changes did not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.

2. Shall become effective upon review and approval by GPUNC Management.

6.15 ENVIRONMENTAL QUALIFICATION

1. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines) or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-50 dated October 24, 1980.

2. By no later than December 1, 1980, complete and auditible records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

6.16 IODINE MONITORING PROGRAM

A program which will ensure the capability to accurately determine

the airborne iodine concentration in vital areas under accident conditions shall be implemented. This program shall include the following:

1. Training of personnel,

2. Procedures for monitoring, and

3. Provisions for maintenance of sampling and analysis equipment.

6.17 MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS

6.17.1 GPU Nuclear Corporation initiated safety related changes to the radioactive waste system (liquid, gaseous and solid):

1. Shall be reported to the Commission in the Annual Report (Specification 6.9.1B) for the period in which the evaluation was reviewed. The discussion of each change shall contain:

   a. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR 50.59;

   b. Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;

   c. A detailed description of the equipment, components and processes involved and the interfaces with other plant systems;

   d. An evaluation of the change which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;

   e. An evaluation of the change which shows the expected maximum exposures to individuals in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;

   f. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

   g. An estimate of the exposure to plant operating personnel as a result of the change; and

   h. Documentation of the fact that the change was reviewed and

approved.

2. Shall become effective upon review and approval in accordance with Section 6.5.1.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 77 TO FACILITY OPERATING LICENSE NO. DPR-50

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

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

Introduction

By letters dated April 10, 1981 (L1L 093, TSCR No. 100), August 13, 1981 (L1L 209, TSCR No. 100A) and November 25, 1981 (L1L 291, TSCR No. 100B), Metropolitan Edison Company (Met Ed) requested an amendment to Appendices A and B of Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit No. 1 (TMI-1). The proposed amendment involves substantial changes to Appendix A, Section 6, the administrative controls section of the Technical Specifications (TSs), to reflect major changes in the GPU Nuclear Corporation (GPUNC) organization and internal safety review process. The requested amendment to Appendix B will be the subject of future correspondence.

Discussion and Evaluation

The requested changes to Section 6 of Appendix A were submitted for the following reasons: (1) to update the wording to reflect that used in the NRC Standard Technical Specifications (STS); (2) to reflect organizational changes previously approved by issuance of Amendment No. 74 dated September 23, 1981, to the Operating License; (3) to reflect changes to GPUNC's program for Safety Review and Operational Advice endorsed by the NRC staff in Section III.C of Supplement 1 to NUREG-0680 (TMI-1 Restart Evaluation); (4) to specify minimum shift crew composition consistent with the Atomic Safety and Licensing Board Partial Initial Decision (ASLB-PID) dated August 27, 1981; and (5) to reflect the changes to the radiological effluent TSs previously approved by issuance of Amendment No. 72 dated August 6, 1981 to the Operating License.

Since Section 6 of Appendix A is substantially revised by this amendment, we provide a brief description and our evaluation of individual sections (6.1 through 6.17) below.

Section 6.1 - Responsibility - This section has been revised to assign overall responsibility for unit operation to the Vice President - TMI-1 and to designate the Shift Supervisor as having responsibility for the control room command function.

We have reviewed these changes to Section 6.1 and find that responsibility for the unit operation is appropriately assigned to the Vice President - TMI-1, and that the Shift Supervisor's responsibility meets that described in Task Action Plan Item I.C.3; we conclude that the assignments of responsibility are acceptable.

Section 6.2 - Organization - This section has been revised to be more consistent with the wording of the STS, to reflect the change to GPUNC as approved in Amendment No. 74, and to revise the shift crew composition to reflect the ASLB-PID of August 27, 1981.

Our review of these changes indicates that they are consistent with the STS and that the shift crew composition meets the condition stated in the ASLB-PID (license condition 9(a), PID para. 583, 14 NRC 381, 580).[1] This section also specifies the requirements for a Shift Technical Advisor which is in accordance with the requirements of NUREG-0737, Item I.A.1.1. We therefore conclude that these changes are acceptable.

Section 6.3 - Unit Staff Qualification - This section has been revised to upgrade the qualification requirements of the unit staff to meet those described in ANSI/ANS 3.1-1978 and to include the requirements of Sections A and C of Enclosure 1 of the March 28, 1980 letter to all licensees. In addition, the qualification requirements apply to the entire unit staff including the Shift Technical Advisor, as opposed to the previous requirement applying to only supervisory and professional personnel.

We have reviewed these qualification requirements and conclude that they are an upgrade from those in the existing TSs for TMI-1 and are consistent with Section 13.1 of the Standard Review Plan; we therefore conclude that they are acceptable.

Section 6.4 - Training - This section has been revised to require training requirements which meet or exceed Regulatory Guide 1.8 of 1977 and include the supplemental training requirements for licensed operators specified in Sections A and C of Enclosure 1 to the March 28, 1980 NRC letter to licensees. In addition, this section has been revised to update current organizational titles and to provide for a more positive direction of the Radiological Control training by the Vice President - Radiological and Environmental Control. This section also now includes the training requirements for the fire brigade.

We have reviewed these proposed changes and conclude that they incorporate current staff guidance for training requirements and provide for acceptable training provisions for the plant staff. We therefore conclude that these changes are acceptable.

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[1] Other conditions relating to shift staffing, required by the PID, will be incorporated in the license by a later amendment.

Section 6.5 - Review and Audit - Subsections 6.5.1 and 6.5.2 have been substantially revised.

In Subsection 6.5.1 (Technical Review and Control), the review function currently performed by the Plant Operations Review Committee (PORC) has been revised to provide for independent review using qualified individuals/groups to perform an independent review of all proposed changes to procedures, the facility, the TSs, proposed license amendments, and other review functions previously conducted by the PORC.

Additionally, they conduct a continuing review of overall plant performance and identify trends. The review of trends includes consideration of violations of requirements, significant operating abnormalities or deviations from expected plant behavior, and events requiring notification of the NRC. The qualifications of responsible technical reviewers (those responsible for the technical content of each review) who will be designated in writing, will meet or exceed the qualifications of Section 4.4 of ANSI/ANS 3.1 of 1978.

Subsection 6.5.2 (Independent Safety Review) has been revised to assign responsibility for independent safety reviews to the Vice Presidents of each division within GPUNC for their areas of responsibility. The reviews will be performed by an individual/group not having direct responsibility for the activity under review. This function was previously performed by the Met Ed Corporate Technical Support Staff (Generation Review Committee).

Subsection 6.5.3 (Audits), previously Subsection 6.1.2.A.3, has been revised to be more consistent with the STS. Inspection and audits associated with fire protection (previously Section 6.14) are now identified under this section for consistency.

Subsection 6.5.4 (Independent Onsite Safety Review Group (IOSRG)) is an entirely new review group independent of plant management that provides for a continuing onsite review of operationally oriented activities to fulfill the function of an Independent Safety Engineering Group (Task Action Plan Item I.B.1.2 of NUREG-0737).

It should be also noted that the proposed change deletes specific review responsibilities of the General Office Review Board (GORB) from the TS requirements (currently covered in Subsection 6.5.2.B). The review responsibilities needed to satisfy regulatory requirements are specified under Sections 6.5.1 and 6.5.2 of the revised TS. Hence, there is no need to delineate specific responsibilities for the GORB. We note that the GORB is considered a part of the licensee's safety review program and must be maintained as a functional entity by virtue of it being part of the licensee's corporate organization as shown on Figure 6.1 of TS.

We have reviewed the proposed changes to Section 6.5 of the TSs and find that the resulting provisions for review and audit meet our position described in Revision 2 to Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)", pertaining to reviews and audits. In addition, the proposed IOSRG meets Task Action Plan Item I.B.1.2 of NUREG-0737. Accordingly, we find the GPUNC's provisions for review and audit to be acceptable.

Section 6.6 - Reportable Occurrence Action - This section has been changed only to reflect the previously approved reorganization of GPUNC and reflects the up-to-date divisional responsibilities and titles. Hence, we find the proposed changes acceptable.

Section 6.7 - Occurrences Involving a Safety Limit Violation - This section has been changed only to reflect the previously approved reorganization of GPUNC and reflects up-to-date divisional responsibilities and titles. Hence, we find the proposed changes acceptable.

Section 6.8 - Procedures - This section has been revised to conform more closely with the wording of the STS and to reflect the revised review and approval responsibilities described in the proposed change to Section 6.5.1 of the TSs. Hence, we find the proposed changes acceptable.

Section 6.9 - Reporting Requirements - This section has been revised to include reporting of information related to the periodic Leak Reduction program and challenges and failures of the pressurizer power operated relief valve and safety valves. These changes relate to NUREG-0737, Items III.D.1.1 and II.K.3.3. Since these changes are consistent with the requirements of NUREG-0737, Item III.D.1.1 and II.K.3.3, we find them to be acceptable.

Sections 6.10 through 6.15 and 6.17 have only minor revisions which are being made for one of the following reasons: (1) to conform more closely with the wording of the STS; (2) to reflect previously approved organization changes; or (3) to reflect changes being made in Section 6.5 relating to safety reviews. Hence, we find these changes acceptable.

Section 6.16 - Iodine Monitoring Program - This is a new section added to conform with the requirements of NUREG-0737, Item III.D.3.3, and the wording is consistent with the STS. Hence, we find this change acceptable.

The changes to Sections 6.1 through 6.5 have been the subject of issues litigated in the TMI-1 restart proceeding. We have reviewed the areas of the ASLB-PID related to these sections and with the exception of implementing the additional license conditions specified by the Board (PID paragraph 583, 14 NRC 381, 580) which will be accomplished by a later amendment, we find that these changes are consistent with the findings in the ASLB-PID.

Based on our review and for the reasons specified under each section (6.1 through 6.17), we find the changes to Section 6 of Appendix A to the Operating License as proposed in TSCR No. 100B, acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

Sections 6.1 through 6.5 have been the subject of litigation in the TMI-1 restart proceeding. The changes to these sections provided by this amendment are consistent with the Board's findings in that proceeding. For this reason and for other reasons specified under our evaluation of the individual sections above, we conclude that there is reasonable assurance that the activities authorized by the above sections of the amendment can be conducted without endangering the health and safety of the public.

With respect to Sections 6.6 through 6.17, we have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

The following NRC staff personnel have contributed to this Safety Evaluation: F. Allenspach, R. Jacobs.

Dated: April 28, 1982

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-289

METROPOLITAN EDISON COMPANY

JERSEY CENTRAL POWER AND LIGHT COMPANY

PENNSYLVANIA ELECTRIC COMPANY

GPU NUCLEAR CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 77 to Facility Operating License No. DPR-50, issued to Metropolitan Edison Company, Jersey Central Power and Light Company, Pennsylvania Electric Company, and GPU Nuclear Corporation (the licensees), which revised the Technical Specifications for operation of the Three Mile Island Nuclear Station, Unit No. 1 (the facility) located in Dauphin County, Pennsylvania. The amendment becomes effective 4 months after its date of issuance or upon reactor initial criticality following authorization to restart, whichever occurs first.

The amendment revises the Administrative Controls Section of the Technical Specifications to reflect major changes in the GPU Nuclear Corporation organization and internal safety review process. Some aspects of the amendment have been the subject of litigation in the TMI-1 restart proceeding and are consistent with the Licensing Board's findings in that proceeding.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated April 10, 1981, as supplemented August 13, 1981, and November 25, 1981 (2) Amendment No. 77 to License No. DPR-50, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. 20555, and at the Government Publications Section, State Library of Pennsylvania, Education Building, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania 17126. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 28th day of April 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing