

ENCLOSURE 5



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November 29, 1982  
4410-82-L-0014

TMI Program Office  
Attn: Dr. B. J. Snyder, Program Director  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Organization Plan Revision No. 6

Organization Plan Revision No. 5 was submitted to the NRC on August 5, 1982. At that time GPU indicated that a change in the TMI-2 safety review process was being planned. This proposed change is to implement that plan. It also includes the contents of Organization Plan Revision No. 5 recently approved by the NRC.

The proposed Revision No. 6 to the Organization Plan for TMI-2 is attached. The organization charts have been changed to eliminate the Generation Review Committee (GRC) under the Vice President - Technical Functions, and the Plant Operations Review Committee (PORC). The change also implements addition of the TMI-2 Safety Review Group (SRG) under the Licensing and Nuclear Safety Director. This change reflects a change in the review, approval, and audit process at TMI-2, similar in concept to the process being instituted at TMI-1, but differing where GPU believes the TMI-2 unique circumstances warrant. The proposed revision shifts the Review and Audit requirements from Section 6 of Appendix A of the Technical Specifications to the Organization Plan. The Technical Specifications require NRC approval of changes to the Organization Plan prior to implementation.

Figure 1-1 has also been modified to show the location of the Emergency Preparedness Organization reporting to the Nuclear Assurance Division. This is not an organizational change but simply an addition to the chart for completeness.

A Review and Audit section has been inserted into the Organization Plan to define the review, approval, and audit process to be implemented at TMI-2.

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The process provides for interdisciplinary reviews, and independent technical and safety reviews of specified documents. The requirements for independent safety review of specified documents by the SRG is identified in this Organization Plan change. The SRG is a permanent, full-time group of qualified individuals designated to perform this function, replacing the previous PORC and GRC which were committees which convened periodically and sometimes with rotating personnel. GPU believes this altered organization will reduce unnecessary review, will permit expediting the review process, and will focus GPU resources on the areas which do require significant safety review.

A corporate procedure is being developed which defines a review and approval matrix identifying positions responsible for preparation, independent review and approval for various categories of documents. The use of SRG and other GPUNC departments/divisions as described in the Organization Plan and implementing corporate procedure provides an independent review function and eliminates the need for the presently existing PORC and GRC.

The proposed TMI-2 Safety Review Group (SRG) will satisfy the requirements for an independent, full-time, safety engineering staff to be located onsite. The SRG will be a group of technical personnel who are assigned onsite at TMI, and report to the Licensing and Nuclear Safety Director within the TMI-2 Division. The SRG will conduct an ongoing program to evaluate the technical adequacy of procedures and design changes important to safe operation of the plant as defined by the Organization Plan and implementing procedure(s). The SRG will evaluate TMI-2 operations from a safety perspective. Additionally, management audits of unit activities now performed under the cognizance of the GRC will continue to be performed under the cognizance of QA and the results will be forwarded to SRG, which will make recommendations on followup of audit findings as appropriate.

In replacing PORC with SRG, it was realized that SRG must be placed in the GPUNC organization in a way that assures independence from both plant operations and engineering. The appropriate placement was determined to be within the Licensing and Nuclear Safety Department which reports directly to the Office of the Director, TMI-2.

This organization operates independently from both plant operations and engineering and has the charter to advise the Office of the Director on all safety matters. The Manager, SRG also has the authority and responsibility to go directly to the Office of the President to obtain resolution on Nuclear Safety items on which the SRG disagrees with the TMI-2 Office of the Director.

The TMI-2 SRG functions as most licensee off-site review groups except that because almost all of the technical resources are located within TMI-2 Division it is appropriate to locate this safety review group within the TMI-2 Division. This placement of SRG provides additional independence beyond that presently possessed by PORC, which now reports within the Site Operations Department, parallel to both Plant Engineering and Operations.

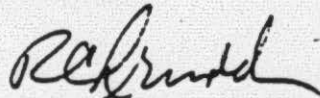
The SRG will consist of a Manager plus at least five qualified engineers as indicated in the Organization Plan. In addition, several technical analysts are included in this group to conduct operational trend analysis previously performed by the Technical Specification Compliance Group. The qualification requirements for these personnel are not as extensive as required for safety review engineers because the tech analysts will not perform sole safety review functions for SRG.

Independent Safety Review will be performed by SRG members with qualifications comparable to previous qualifications for GRC members.

Although not contained in the Organization Plan description, several other corporate review groups exist. NRC is aware of the General Office Review Board (GORB), Safety Advisory Board (SAB), and Technical Assessment and Assistance Group (TAAG). The GORB and the SAB report directly to the Office of the President, GPUNC and the TAAG reports to the Office of the Director, TMI-2 and are responsible for various independent assessments. For flexibility considerations in the unique TMI-2 circumstances, GPU does not wish to include these voluntary groups in the docketed Organization Plan. However, GPU will advise the NRC of any GPUNC intentions to disband these groups in advance of any actual changes.

Expeditious NRC approval of this proposed change is requested with a mutually agreeable implementation date to be established after receiving your approval so that GPU can make the appropriate staff assignments and provide adequate training.

Sincerely,



R. C. Arnold  
President

RCA:JEL:sle

Attachment

cc: L. H. Barrett, Deputy Program Director, TMI Program Office

ORGANIZATION PLAN

THI-2

## ORGANIZATION PLAN - TMI-2

### 1.0 ORGANIZATION

The organization described in this Plan provides the necessary functional relationships to support the recovery of TMI-2. This Plan provides the organizational structure for management of unit operation and recovery in addition to that organization for unit support in the engineering function.

#### 1.1 GPU Nuclear Corporation

The GPU Nuclear Corporation organization chart is shown in Figure 1.1. This organization provides engineering and management support for the operation and recovery of TMI-2.

#### 1.2 TMI-2 Organization

The TMI-2 organization chart is shown in Figure 1.2. This organization performs those necessary activities associated with operations, maintenance, and recovery of TMI-2 in addition to engineering, licensing, and safety review and evaluation.

### 2.0 DEFINITIONS

- 2.1 **TECHNICAL SPECIFICATIONS** - The part of the TMI-2 Operating License which governs operating limits and administrative requirements for the power plant. The Technical Specifications reference the TMI-2 Organization Plan which defines organization and administrative requirements. The Organization Plan and changes thereto require NRC-TMIPD approval prior to implementation but are not part of the License or Technical Specification.
- 2.2 **UNREVIEWED SAFETY QUESTION** - As defined in 10CFR50.59 "A proposed change, test or experiment shall be deemed to involve an unreviewed safety question (1) if the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety (ITS) previously evaluated in the Safety Analysis Report may be increased, or (2) if the possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report may be created, or (3) if the margin of safety as defined in the basis for any technical specification is reduced."

In addition, because of the uniqueness of TMI-2, - A proposed change, test or experiment shall be deemed to involve an unreviewed safety question if (1) the probability of occurrence may be increased or the consequences of an accident or malfunction of equipment Important To Safety (ITS) previously evaluated in the Technical evaluation Report (TER) or System Description (SD) or

Safety Evaluations previously submitted to NRC may be increased for activities not yet completed, or (2) the possibility of an accident or malfunction of a different type than any previously evaluated in the TER or SD or Safety Evaluations previously submitted to NRC may be created.

- 2.3 SAFETY EVALUATION - An evaluation which includes a determination of:
  - 2.3.1 Whether an unreviewed safety question is involved.
  - 2.3.2 Whether a Technical Specification Change or Recovery Operations Plan Change is needed.
  - 2.3.3 Whether a significant environmental impact would result.
  - 2.3.4 Whether a significant nuclear safety impact would result.
  - 2.3.5 Whether the margin of safety as defined in other Licensing Basis Documents is reduced.
- 2.4 TECHNICAL REVIEW - Reviewing a document for technical and safety adequacy. It includes a review and concurrence on:
  - 2.4.1 The necessity for a Cross-Disciplinary Technical Review.
  - 2.4.2 The safety evaluation.
- 2.5 CROSS-DISCIPLINARY REVIEW - A supplemental technical review by other organizations or disciplines upon which the document could have some effect. Such a review would be required when the scope of the review exceeds the assigned accountability and/or competence of the reviewer; or if it is a multi discipline review; or if it may have licensing implications. For example, a piping system change document might have to be reviewed by an electrical technical reviewer to determine the effect of a leak in the piping system on electrical components near the piping system.
- 2.6 RESPONSIBLE TECHNICAL REVIEWER - An individual or group other than the preparer of a document who performs a Technical Review. The Responsible Technical Reviewer also concurs with the safety evaluation and Review Significance determination done by the Preparer. He must be knowledgeable and experienced in the area of the review, must be different from the preparer, but may be from the same organization as the preparer.
- 2.7 INDEPENDENT SAFETY REVIEW - This is an independent verification of the previous safety review of the Preparer. It includes a review of the document for safety adequacy/environmental impact, a review of the determination as to Review Significance and a review of any associated written safety evaluations. It further includes the review of the documentation of such reviews, and concurrence with a previous review. The Independent Safety Review will be performed

- by a person who must be knowledgeable and experienced in the area of the review and must not have direct responsibility for the performance of the activities under review but may be from the same functional organization as the Preparer. For items without Review Significance, the Independent Safety Review may also be performed by the Responsible Technical Reviewer. For items with Review Significance, the SRG performs the Independent Safety Review.
- 2.8 CONCURRENCE - Written agreement that the provisions in a document for which review has been requested are acceptable for implementation within, or from the standpoint of, the signer's area of responsibility.
- 2.9 SIGNIFICANT ENVIRONMENTAL IMPACT - Any release to the environment which would exceed criteria in Appendix I of 10CFR50, approach the effluent control limits in the Environmental Technical Specifications, approach the 10CFR100 limits, or exceeds levels assumed in accident analysis which show conformance with 10CFR100.
- 2.10 IMPORTANT TO SAFETY (ITS) - A special classification or category of those structures, systems, components and activities that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public. It encompasses the broad class of plant features covered (not necessarily explicitly) in the General Design Criteria, (10CFR50 Appendix A) that contributes in important ways to the safe operation and protection of the public in all phases and aspects of facility operation (i.e., normal operation and transient control as well as accident mitigation). It includes Safety-Related as a subset.
- 2.11 SAFETY RELATED - The actions, structures, systems, and components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public.
- 2.12 REVIEW SIGNIFICANCE - Items that are Important To Safety, or proposed changes to Technical Specifications, License, Special Orders or Agreements, Recovery Operations Plan, Organization Plan, or involve an Unreviewed Safety Question or a Significant Environmental Impact. Also, those system operating procedures and associated emergency, abnormal, alarm response procedures which require NRC approval. In addition, those activities which exceed PEIS values. Items which are determined to have Review Significance require line SRG review.
- 2.13 ORGANIZATION PLAN - As used in this document, the organization plan is the plan referenced by the TMI-2 Technical Specifications Appendix A Section 6.2 and submitted to the NRC for their approval prior to implementation. See 2.1 above.

2.1A REVIEW - As used in this plan, review except Technical Review and Independent Safety Review has two meanings:

2.14.1 Review for Concurrence - To be used when a document places requirements on the reviewing organization with which they should concur.

2.14.2 Review for Comment - Persons may be requested to review and comment (including alternative recommendations) to the Originator without concurrence.

2.15 PREPARER - The person who is responsible for the development of items such as Policies, Plans or Procedures. In the GPU Nuclear Corporate Policies, Plans and Procedure System, this person is referred to as the Originator.

2.16 PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (PEIS) - NRC document prepared to describe the environmental impact of the TMI-2 recovery program. Includes numerical impact values used to determine acceptability of the program.

2.17 RECOVERY MODE - A condition in which the reactor is subcritical with an average reactor coolant temperature of less than 280°F.

2.18 IMPLEMENTING APPROVAL - The signature of a Manager (or person with a higher title) which indicates that the product has been properly prepared and reviewed and is thereby released for implementation.

2.19 LICENSING BASIS DOCUMENT (LBD) - Any document which is recognized by a regulatory agency as part of the licensing basis of the plant. These documents include the FSAR, Technical Evaluation Reports (TERs), System Descriptions (SDs), Emergency Plan, Offsite Dose Calculation Manual, Security Plan, Fire Protection Plan, Quality Assurance Plan, PEIS, NPOES permit and any other similar documents which have been officially submitted to a regulatory agency.

### 3.0 ADMINISTRATION

#### 3.1 Plan Approval and Audit

3.1.1 The docketed TMI-2 Organization Plan and changes thereto shall be approved by the Office of the President, GPU Nuclear Corporation.

3.1.2 Changes to the docketed Organization Plan shall be submitted to the NRC for approval prior to implementation.

3.1.3 The QA Department shall conduct annual audits to verify conformance of the organization with the Organization Plan. SRG shall review the results of such audits and make recommendations as appropriate.



### 3.2 Technical Specification Title Cross-Reference

This section has been deleted. The TMI-2 Recovery Technical Specifications have been revised to properly reflect GRUNC individual titles.

## 4.0 REVIEW AND AUDIT

### 4.1 Technical Review and Control

The Vice President and/or Director of each division within GPU Nuclear Corporation as indicated in Figure 1.1, shall be responsible for ensuring the preparation, review, and approval of documents required by the activities within their functional area of responsibility for TMI-2. Implementing approvals shall be performed at the cognizant section manager/director level or above. Independent safety review and audit shall be conducted in accordance with this Organization Plan.

For items such as those described in paragraphs 4.2.5.a, b and c, the RTR performs the initial screening to determine the requirement for line SRG review. For other items, such as those described in paragraphs 4.2.5.d, e and i., responsible line management in the affected departments has this responsibility.

- 4.1.1 Each procedure required by Technical Specification 6.8 and other procedures including those for test and experiments and changes thereto shall be prepared by a designated individual(s)/group knowledgeable in the area affected by the procedure. Each such procedure, and changes thereto, shall be given a technical review 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.
- 4.1.2 Proposed changes to the Technical Specifications shall be reviewed by a knowledgeable individual(s)/group other than the individual(s) group who prepared the change, and the SRG.
- 4.1.3 Proposed modifications 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 technically reviewed by an individual/group other than the individual/group which designed the modification but may be from the same group as the individual who designed the modification.
- 4.1.4 Proposed tests and experiments 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.

- 4.1.5 The Security Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.
- 4.1.6 The Emergency Plan and implementing procedures shall be reviewed by a knowledgeable individual(s)/group other than the individual(s)/group which prepared them.
- 4.1.7 The Recovery Operations Plan and implementing procedures and changes thereto shall be reviewed by a knowledgeable individual/group other than the individual/group which prepared them.
- 4.1.8 Individuals responsible for reviews performed in accordance with 4.1.1 through 4.1.7 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.
- 4.1.9 Written records of activities performed under specifications 4.1.1 through 4.1.8 shall be maintained.
- 4.1.10 Responsible Technical Reviewers shall meet or exceed the qualifications of ANSI/ANS-3.1 - 1978 Section 4.4 for Reactor Engineering, Instrumentation and Control, Chemistry and Radiochemistry, Radiation Protection and Quality Assurance Reviewers or have seven (7) years of appropriate experience in the area of their specialty. All other RTR's shall meet Section 4.6 i.e. shall either, (1) have a Bachelor's Degree in Engineering or the physical sciences and three years of professional-level experience in the area being reviewed or, (2) have seven years of appropriate experience in the field of their specialty. 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.

#### 4.2 Independent Safety Review Function

- 4.2.1 The Vice President and/or Director of each division within GPU Nuclear Corporation as indicated in Figure 1.1 shall be responsible for ensuring the Independent Safety Review of the subjects described in 4.2.5 within his assigned area of safety review responsibility.
- 4.2.2 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. For those documents determined to be Review Significant, the Independent Safety Review shall be performed by or under the cognizance of SRG.

4.2.3 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 unit operations
- b. Nuclear engineering
- c. Chemistry and radiochemistry
- d. Metallurgy
- e. Instrumentation and control
- f. Radiological safety
- g. Mechanical engineering
- h. Electrical engineering
- i. Administrative controls and quality assurance practices
- j. Emergency plans and related organization, procedures and equipment
- k. Other appropriate fields such as radioactive waste operation associated with the unique characteristics of TMI-2.

4.2.4 Consultants may be utilized to provide expert advice.

4.2.5 The following subjects shall be independently reviewed:

- a. Written safety evaluations of changes in the facility as described in the Safety Analysis Report, Technical Evaluation Reports, or docketed System Descriptions, of changes in procedures as described in the Safety Analysis Report, Technical Evaluation Reports, or docketed System Descriptions, and of tests or experiments not described in the Safety Analysis Report, Technical Evaluation Reports, or docketed System Descriptions, which are completed without prior NRC approval under the provisions of 10CFR 50.59(a)(1). This review by SRG is to verify that such changes, tests or experiments did not involve a change in the Technical Specifications or an Unreviewed Safety Question.
- 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 shall be reviewed by SRG prior to implementation. Changes to Review Significant procedures which revision is not deemed to be Review Significant shall not be required to be reviewed by SRG prior to implementation.

- c. Proposed changes to Technical Specifications or license amendments shall be reviewed by SRG prior to submittal to the NRC for approval.
- d. Violations, deviations, and reportable events which require 24 hour 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. SRG shall review all 24 hour reportable events and make recommendations as appropriate.
- e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, shall be coordinated and reviewed by TMI-2 SRG.
- f. Special reviews, investigations or analyses and reports thereon as requested by the Office of the Director TMI-2 or the Licensing and Nuclear Safety Director shall be performed by TMI-2 SRG.
- g. Written summaries of audit reports in the areas specified in section 4.3.
- h. Recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components, that could affect nuclear safety or radioactive waste safety. If of Review Significance, SRG shall review.
- i. Any other matters involving safe operation of the nuclear power plant which the SRG deems appropriate for consideration, or which is referred to the SRG.

4.2.6 Reports of reviews encompassed in Section 4.2.5 shall be maintained.

### 4.3 Audits

4.3.1 Audits of unit activities shall be performed in accordance with the TMI-2 Recovery QA 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 nonconformances and corrective actions program 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 Recovery 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 12 months.
- f. The Security Plan and implementing procedures at least once per 12 months.
- g. The Radiation Protection Plan and implementing procedures at least once per 12 months.
- h. The Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and technical audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and technical audit of the fire protection and loss prevention program, by an outside qualified fire consultant at intervals no greater than 3 years.
- k. Any other area of unit operation considered appropriate by the SRG or the Office of the President-GPUNC.

4.3.2 Audit reports encompassed by sections 4.3.1 shall be forwarded for action to the management positions responsible for the areas audited and SRG within 60 days after completion of the audit. SRG will review specified audits performed by QA and make recommendations as appropriate.

4.4 Safety Review Group (SRG)

Going to Tech. Spec.

- 4.4.1 The SRG shall be a full-time group of engineers, independent of the Site Operations or Engineering staff, and located onsite within the TMI-2 division. (See Figure 1.2).
- 4.4.2 The TMI-2 SRG shall consist of the Manager, SRG and a minimum staff of 5 engineers.
- 4.4.3 The SRG shall report to the Licensing & Nuclear Safety Department Director within the TMI-2 Division.
- 4.4.4 The review functions of the SRG shall include:
- 1) the independent safety review activities stated in Section 4.2.5.
  - 2) assessment of unit operations and performance and unit safety programs from a safety perspective.
  - 3) any other matter involving safe operations at the nuclear power plant that the Manager, SRG or Licensing and Nuclear Safety Director deem appropriate for consideration.
- 4.4.5 For those reviews requiring expertise outside that possessed by SRG, SRG is authorized to require reviews by other company groups as deemed appropriate by the Manager, SRG and Licensing and Nuclear Safety Director. SRG may also utilize consultant expertise as it deems appropriate.
- 4.4.6 The SRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the SRG shall provide recommendations to the management positions responsible for the areas reviewed. The SRG shall have authority to require independent reviews by other organizations as necessary to complete its functional responsibilities.
- 4.4.7 The SRG engineers shall have either; (1) a Bachelor's Degree in Engineering or the Physical Sciences and five (5) years of professional level experience in the nuclear power field including technical supporting functions, or,

(2) 9 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.

4.4.8

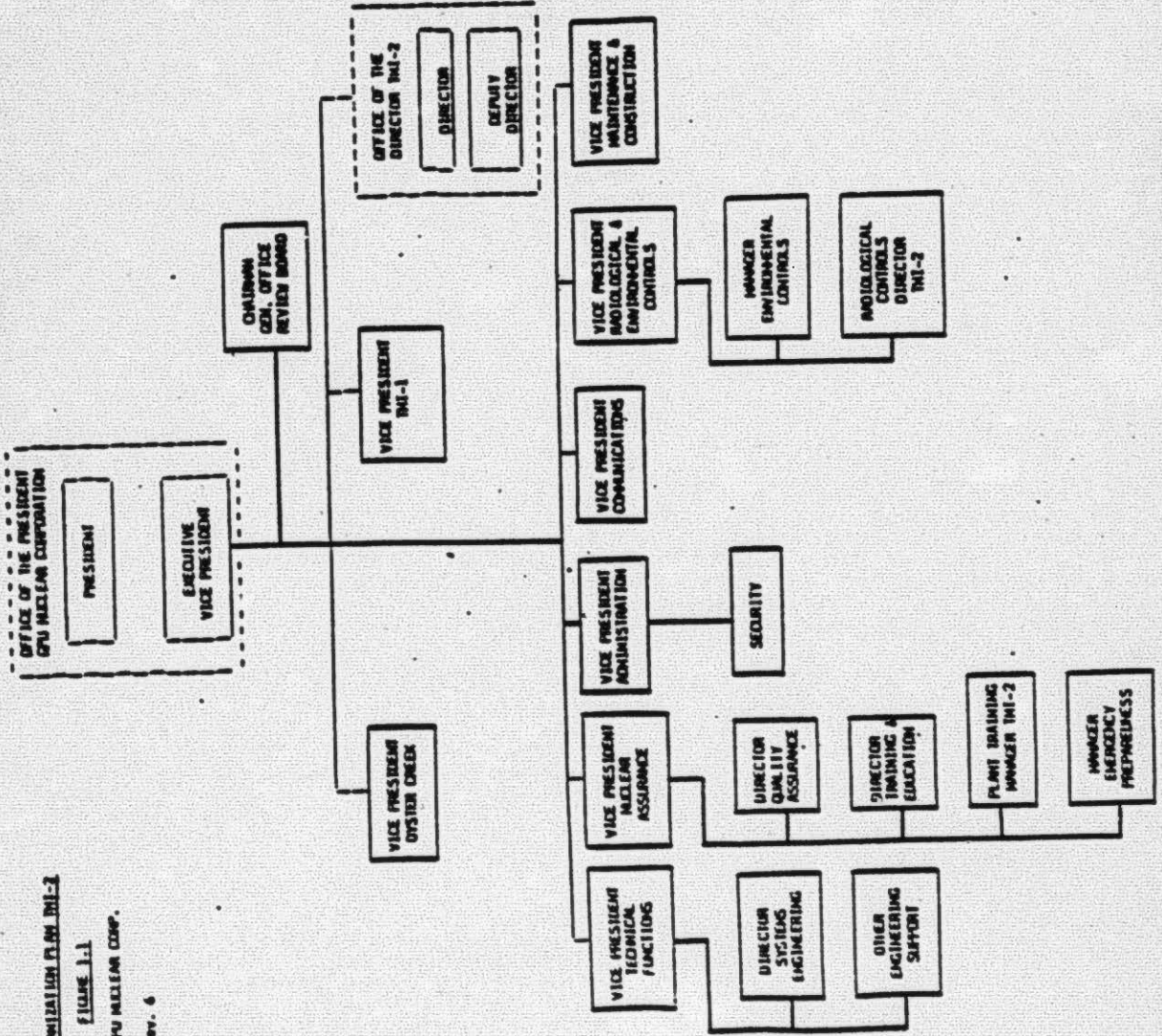
Although day to day results of evaluations by the SRG are communicated directly to the responsible department by the SRG, special reports are prepared only for items deemed appropriate by SRG as concurred with by the Licensing and Nuclear Safety Director. These reports of evaluations and assessments by SRG shall be prepared, approved, and then transmitted to the office of the Director, TMI-2 and the management position responsible for the area reviewed through the Licensing and Nuclear Safety Director. These reports shall be maintained for the life of the operating license.

ORGANIZATION PLAN, TMI-2

FIGURE 1-1

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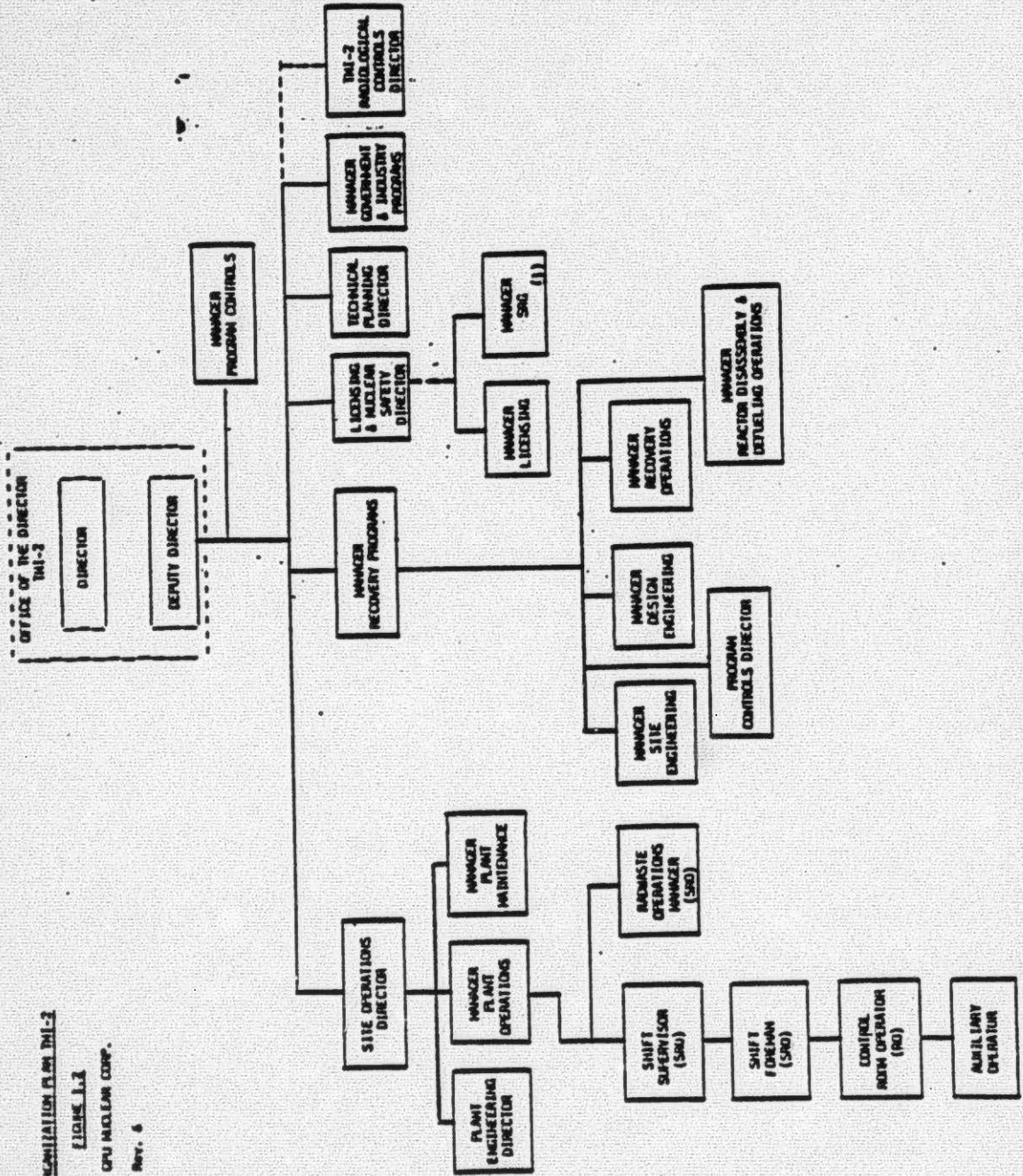


ORGANIZATION PLAN TMI-2

FIGURE 1.3

GE NUCLEAR CORP.

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(1) Advisory to Office of the Director TMI-2 with access to office of the President for resolution of disagreements.