

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

Technical Specification Change Request No. 40

The Licensee requests that the attached revised pages replace the following pages of the existing Technical Specifications.

Appendix A Replace pages 6-1 through 6-16 with attached pages 6-1 through 6-9

Appendix B Replace page 5-5

Reason for Change

The attached change pages reflect changes in various sections of the Appendix A and Appendix B Administrative Technical Specifications as detailed below.

Appendix A

Section 6.1 Responsibility

Has been revised to reflect that the Director TMI-2 has become the position responsible for overall unit operation under the Technical Specification.

Section 6.3.2 Unit Staff Qualifications

The title, Manager-Radiological Controls has been changed to Radiological Controls Director TMI-2 and the option for his deputy has been added.

Section 6.5 Review and Audit

The requirements of this section of the Technical Specifications are being shifted to Section 3.0 of the Organization Plan, changes to which also require NRC approval per Section 6.2 of the Technical Specifications. Additionally, a significant change to the review and audit concept is proposed. This change is further discussed in Organization Plan Revision 6, which is being submitted under separate cover. Essentially, the change deletes the presently existing Plant Operations Review Committee (PORC) and Generation Review Committee (GRC) and establishes a full time standing group (Safety Review Group) to perform the safety review functions.

Section 6.6 Reportable Occurrence Action

Specification 6.6.1.c has been deleted. Specification 6.6.1.c specified internal review and distribution requirements for the monthly and quarterly report required pursuant to Specification 6.9.1.10. As the requirement for the report specified in 6.9.1.10 have been completed Specifications 6.6.1.c is no longer needed.

Section 6.7 Safety Limit Violation

Has been deleted as Section 2 of the Technical Specifications does not contain any safety limits to violate.

Section 6.8 Procedures

Has been revised to reflect the new review organizations and increase the control over temporary changes allowed by Section 6.8.3.1 of the Technical Specifications. Section 6.8.1(g) Recovery Mode implementation procedure system has been deleted because the reference to Appendix A of Regulatory Guide 1.33 Revision 2 covers all these procedures which should be required for Recovery Mode implementation.

Section 6.8.2 has been revised to eliminate the requirement for prior NRC approval of Recovery Operations Plan implementing procedures but preserves NRC prior approval of Specific Recovery Mode implementing procedures. However only those changes to recover, mode implementing procedures which have specific impact as defined in 6.8.2 will require prior NRC approval. Non-significant changes thereafter will not require prior NRC approval, e.g., typographical errors, corrections for proper numbering, system labels, etc. Section 6.8.3 has also been revised similar to TMI-1 to reduce the number of procedures to be approved by the SRO to only those procedures which affect the operational status of unit systems or equipment.

Section 6.9 Reporting Requirements

Has been revised to delete the reports specified by Subsection 6.9.1.6, Radiation Safety Program Report, and Subsection 6.9.1.10, Reporting Requirements For Incident Which Occurred on March 28, 1979 (these reporting requirements have been fulfilled). Section 6.9.1.9.e has been added requiring a thirty day report for each event requiring activation of the Emergency Plan. Section 6.9.1.5.b.2 has been revised to add airport manager designee to be consistent with TMI-1 technical specifications.

Section 6.10 Record Retention

Has been revised to substitute report titles in 6.10.2.f as Subsections 6.9.1.6 and 6.9.1.10 (previously referenced) are being deleted.

Appendix B

Section 5.5.4 Changes in Procedures, Station Design or Operation

Has been revised to reflect the change in the review process. This review process is further discussed in Organization Plan Proposed Revision 6 which is being submitted under separate cover.

Safety Evaluation Justifying Change

This change describes the administrative structure and control of the GPU Nuclear Corporation as required by Technical Specifications. This change enhances the independent safety review process and incorporates many of the recommendations of various committees and groups overseeing the TMI-2 recovery effort. Furthermore, it has been determined that:

1. The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased.
2. The possibility of an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not increased.
3. The margin of safety defined in the basis of any Technical Specification is not reduced.

Therefore, the proposed change does not constitute an Unreviewed Safety Question.

Amendment Classification (10CFR 170.22)

This change, although administrative in nature, requests changes in the administrative controls associated with safety reviews and is therefore considered a Class III License Amendment. Accordingly, a check for \$4,000 is enclosed.

Implementation

It is requested that NRC approve these changes with implementation to be at a mutually agreeable date to be established later, to allow GPU time to prepare appropriate procedures and to put necessary personnel in place.

SECTION 6.0

ADMINISTRATIVE CONTROLS

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Office of the Director-TMI-2 consists of the Director-TMI-2 and the Deputy Director-TMI-2 and shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during both of their absences.

6.2 ORGANIZATION

GPUNC ORGANIZATION

6.2.1 The GPU Nuclear Corporation (GPUNC) Organization for unit management and technical support shall be as shown in Figure 1.1 of the Organization Plan. The Organization Plan and changes thereto shall be approved by the NRC prior to implementation.

TMI-2 ORGANIZATION

6.2.2 The unit organization shall be as shown on Figure 1.2 of the Organization Plan and:

- 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 Operator shall be in the control room when fuel is in the reactor.
- c. An individual qualified in the radiation protection procedures shall be on site when fuel is in the reactor.
- d. A site Fire Brigade of at least 5 members shall be maintained onsite at all times. The Site Fire Brigade shall not include 3 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.
- e. An individual qualified in radiation protection procedures shall be on site whenever Radioactive Waste Management activities are in progress.

ADMINISTRATIVE CONTROLS

TABLE 6.2-1
MINIMUM SHIFT CREW COMPOSITION#

LICENSE CATEGORY	RECOVERY MODE
SOL	1
OL	1
Non-Licensed	2

#Shift crew composition may be 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.

ADMINISTRATIVE CONTROLS

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI-N 18.1 of 1971 for comparable positions unless otherwise noted in the Technical Specifications.

6.3.2 The Radiological Controls Director TMI-2 or his deputy shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975. Each Radiological Controls Technician in responsible positions/Foreman shall meet or exceed the qualifications of ANSI 18.1-1971, paragraph 4.5.2/4.3.2, or be formally qualified through an NRC approved TMI-2 Radiation Controls training program. Individuals who do not meet ANSI 18.1-1971 Section 4.5.2 are not considered technicians for purposes of determining qualifications but are permitted to perform work for which qualification has been demonstrated. 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.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Plant Training Manager-TMI-2 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 Vice President-Radiological and Environmental Controls.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Plant Training Manager-TMI-2 and shall meet or exceed the requirements of Section 27 of the NFPA Code-1976.

6.5 REVIEW AND AUDIT

Review and audit shall be performed as defined in the Organization Plan, Section 4.0.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:

- a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.
- b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the SRG and a report submitted to the Licensing and Nuclear Safety Director and the Office of the Director TMI-2.
- c. Deleted.

6.7 SECTION DELETED

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Recovery Operations Plan implementation.
- c. Surveillance and test activities of safety related equipment and radioactive waste management equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Radiation Protection Plan implementation.

6.8.2.1 Each procedure of 6.8.1 above, and changes thereto shall receive an Independent Safety Review and approval as required by the TMI-2 Organization Plan and will be reviewed periodically as required by ANSI 18.7 - 1976.

6.8.2.2 Procedures of 6.8.1.a and changes thereto which:

- a. Directly relate to core cooling, or
- b. Could cause the magnitude of radiological releases to exceed limits established by the NRC, or
- c. Could increase the likelihood of failures in systems important to nuclear safety and radioactive waste processing or storage, or
- d. Alter the distribution or processing of significant quantities of stored radioactivity or radioactivity being release through known flow paths.

Shall be subject to approval by the NRC prior to implementation.

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

- a. The intent of the original procedural control is not altered, and
- b. (1) For those procedures which affect the operational status of unit systems or equipment, the change is approved by two members of the unit management staff, at least one of whom holds a Senior Reactor Operator's License. If one of the two above signatures is not by a supervisory person within the Department having cognizance of the procedure being changed, the signature will also be required, or

ADMINISTRATIVE CONTROLS

(2) For those procedures which do not affect the operational status of unit systems or equipment the change is approved by two members of the responsible organization. If one of the two above signatures is not by a section manager/director within the Department having cognizance of the procedure being changed, this signature will also be required, and

- c. The change is documented, Independent Safety Review completed, and approved by the management level specified in the TMI-2 Organization Plan within 14 days, and
- d. Those changes to procedures described by 6.8.2.2 are submitted to the NRC for review within 72 hours following approval by the management level specified for implementation by the TMI-2 Organization Plan Section 4.1.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

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

ANNUAL REPORTS^{1/}

6.9.1.4 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.

6.9.1.5 Reports required on an annual basis shall include:

- a. A tabulation 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,^{2/} 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.

^{1/} A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

^{2/} This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

ADMINISTRATIVE CONTROLS

- b. The following information on aircraft movements at the Harrisburg International Airport:
 1. The total number of aircraft movements (takeoffs and landings) at the Harrisburg International Airport for the previous twelve-month period.
 2. 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.

RADIATION SAFETY PROGRAM REPORT

6.9.1.6 Deleted.

REPORTABLE OCCURRENCES

6.9.1.7 The REPORTABLE OCCURRENCES of Specifications 6.9.1.8 and 6.9.1.9 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 occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP

6.9.1.8 The types of events listed below shall be reported within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the NRC Region Administrator or his designate no later than the first working day following the event, with a written followup report within 30 days. The written followup report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Deleted.
- b. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications.
- c. Abnormal degradation discovered in reactor coolant pressure boundary, or primary containment.
- d. An unplanned reactivity insertion of more than 0.5% delta K/K or occurrence of any unplanned criticality.

ADMINISTRATIVE CONTROLS

- e. Failure or malfunction of one or more components which prevents or could prevent, by itself, the fulfillment of the functional requirements of system(s) used to cope with accidents analyzed in the SAR, TER, or Safety Evaluation previously submitted to NRC.
- f. 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 SAR, TER, or safety evaluation previously submitted to NRC.
- g. Conditions arising from natural or man-made events that, as a direct result of the event, require operation of safety systems or other protective measures required by Technical Specifications.
- i. 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 safety analysis report, Technical Specifications bases; TER, or Safety Evaluation previously submitted to NRC or discovery during unit life of conditions not specifically considered in the safety analysis report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

THIRTY DAY WRITTEN REPORTS

6.9.1.9 The types of events listed below shall be the subject of written reports to the NRC Region Administrator within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. 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.
- b. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation.
- c. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in engineered safety feature systems or radioactive waste treatment systems.
- d. Abnormal degradation of systems other than those specified in 6.9.1.8.c above designed to contain radioactive material resulting from the fission process.
- e. All events which require activation of the Emergency Plan.

ADMINISTRATIVE CONTROLS

REPORTING REQUIREMENTS FOR INCIDENT WHICH OCCURRED ON MARCH 28, 1979

6.9.1.10 Section Deleted. All reporting requirements completed.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the NRC Region Administrator within the time period specified for each report.

6.10 RECORD RETENTION

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

- a. Records sealed source and fission detector leak tests and results.
- b. Records of annual physical inventory of all sealed source material of record.
- c. Records of changes made to the procedures required by Specifications 6.8.1 d. and e.

6.10.2 The following records shall be retained as long as the Licensee has an NRC license to operate or possess the Three Mile Island facility.

- a. Records and logs of unit operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety and radioactive waste systems.
- c. ALL REPORTABLE OCCURRENCES submitted to the Commission.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
- e. Records of changes made to the procedures required by Specifications 6.8.1 a., b., c. and f.
- f. Radiation Safety Program Reports and Quarterly Recovery Progress Reports on the March 28, 1979 incident.
- g. Records of radioactive shipments.
- h. Records and logs of radioactive waste systems operations.
- i. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Safety Analysis Report, TER, SD, or Safety Evaluation previously submitted to NRC.

ADMINISTRATIVE CONTROLS

- j. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- k. Records of transient or operational cycles for those unit components designed for a limited number of transients or cycles.
- l. Records of reactor tests and experiments.
- m. Records of training and qualification for current members of the unit staff.
- n. Records of in-service inspections performed pursuant to these Technical Specifications.
- o. Records of Quality Assurance activities required by the Recovery Quality Assurance Plan.
- p. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- q. Records of meetings of the Plant Operation Review Committee (PORC) and the General Review Committee (GRC) and reports of evaluations prepared by the SRG.
- r. Records of the incident which occurred on March 28, 1979.
- s. Records of unit radiation and contamination surveys.
- t. Records of radiation exposures for all individuals entering radiation control areas.
- u. Records of gaseous and liquid radioactive material released to the environs.

6.11 RADIATION PROTECTION PROGRAM

Personnel radiation protection shall be consistent with the requirements of 10 CFR Part 20 and the NRC approved Radiation Protection Plan.

6.12 HIGH RADIATION AREA

In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area shall be controlled as specified in the Radiation Protection Plan.

5.5.4 Changes in Procedures, Station Design or Operation

Changes in procedures, station design or operation as described in Appendix B Technical Specifications Sections 2 and 5 may be made subject to conditions described below, provided such changes are independently reviewed and approved by the appropriate management level and groups (As defined in Appendix A Tech Spec Section 6.0 and Organization Plan Section 3) prior to implementation. Changes to monitoring programs and special studies as described in Appendix B Technical Specifications Sections 3 and 4 may be made subject to the conditions described below, and must be reviewed and approved by the Manager, Environmental Controls prior to implementation.

- A. The licensee may (1) make changes in the station design and operation, (2) make changes in the procedures described in the document developed in accordance with Subsection 5.5.1, and (3) conduct tests and experiments not described in the document developed in accordance with Subsection 5.5.1, without prior Commission approval, unless the proposed change, test or experiment involves a change in the objectives of the ETS, an unreviewed environmental question, or affects the requirements of Subsection 5.5.5.
- B. A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental impact statement as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements thereto, environmental impact appraisals, or in initial or final adjudicatory decisions; or (2) a significant change in effluents or power level as specified in § 51.5(b)(2); or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this section which may have a significant adverse environmental impact.
- C. The licensee shall maintain records of changes in procedures and in facility design or operation made pursuant to this Subsection, to the extent that such changes constitute changes in procedures as described in the document developed in accordance with Subsection 5.5.1 and initially approved by the NRC. The licensee shall also maintain records of tests and experiments carried out pursuant to paragraph "A" of this Subsection. These records shall include a written evaluation which provides the bases for the determination that the change, test or experiment does not involve an unreviewed environmental question of substantive impact or constitute a change in the objectives of these ETS, or affects the requirements of Subsection 5.5.5 of these ETS. The licensee shall furnish to the Commission, annually or at such shorter intervals as may be specified in the license, a report containing descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.
- D. Changes in program description document developed in accordance with Subsection 5.5.1 which affect sampling frequency, location, gear, or replication shall be reported to the NRC within 30 days after their implementation, unless otherwise reported in accordance