

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
6	<u>ADMINISTRATIVE CONTROLS</u>
6.1	<u>RESPONSIBILITY</u> 6-1
6.2	<u>ORGANIZATION</u> 6-1
6.2.1	CORPORATE 6-1
6.2.2	UNIT STAFF 6-1
6.3	<u>UNIT STAFF QUALIFICATIONS</u> 6-3
6.4	<u>TRAINING</u> 6-3
6.5	<u>REVIEW AND AUDIT</u> 6-3
6.5.1	TECHNICAL REVIEW AND CONTROL 6-4
6.5.2	INDEPENDENT SAFETY REVIEW 6-5
6.5.3	AUDITS 6-7
6.5.4	INDEPENDENT ONSITE SAFETY REVIEW GROUP 6-8
6.6	<u>REPORTABLE OCCURRENCE ACTION</u> 6-10
6.7	<u>OCCURRENCES INVOLVING A SAFETY LIMIT VIOLATION</u> 6-10
6.8	<u>PROCEDURES</u> 6-11
6.9	<u>REPORTING REQUIREMENTS</u> 6-12
6.9.1	ROUTINE REPORTS 6-12
6.9.2	REPORTABLE OCCURRENCES 6-13
6.9.3	UNIQUE REPORTING REQUIREMENTS 6-16
6.9.4	ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT 6-17
6.9.5	SEMI-ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT 6-18
6.10	<u>RECORD RETENTION</u> 6-19
6.11	<u>RADIATION PROTECTION PROGRAM</u> 6-21
6.12	<u>HIGH RADIATION AREA</u> 6-21
6.13	<u>PROCESS CONTROL PROGRAM</u> 6-21
6.14	<u>OFFSITE DOSE CALCULATION MANUAL (ODCM)</u> 6-22
6.15	<u>ENVIRONMENTAL QUALIFICATION</u> 6-22
6.16	<u>IODINE MONITORING PROGRAM</u> 6-22
6.17	<u>MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS</u> 6-23

FIGURES

TITLE

3.5-2F

Deleted

3.5-2G

LOCA Limited Maximum Allowable  
Linear Heat Rate - TMI-1

3.5-2H

APSR Position Limits of Operation  
from 0 EFPD to EOC

3.5-3

Incore Instrumentation Specifications  
TMI-1

6-1

Organization Chart GPU Nuclear  
Corporation

6-2

TMI-1 Onsite Organization

## 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  $\leq 200^\circ$  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 SRC licensed, he shall have completed the SRC 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.

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.

\*\*\*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.

- 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-N 18.1 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 18.1-1978 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 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 25, 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, and change thereto, shall be reviewed by an individual(s)/group other than the preparer, but who may be from the same division 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 Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Vice President TMI-1. shall be reviewed by a knowledgeable individual(s)/group.
- 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 prepared them.
- 6.5.1.12 Individuals responsible for reviews performed in accordance with 6.5.1.1., through 6.5.1.4 shall include a determination of whether or not additional cross-disciplinary review is necessary. If deemed necessary, such review shall be performed by the appropriate personnel. Individuals responsible for reviews considered under 6.5.1.1 through 6.5.1.5 shall render determinations in writing with regard to whether or not 6.5.1.1 through 6.5.1.5 constitute an unreviewed safety question.

#### RECORDS

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

#### QUALIFICATIONS

- 6.5.1.14 Responsible Technical Reviewers shall meet or exceed the qualifications of ANSI N 18.1-1978 Section 4.6, or 4.4 for applicable disciplines. 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-i.

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 OSRG 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 Department 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 Physical Sciences and three (3) years of professional level experience in the nuclear power field including technical supporting functions or 8 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 Department 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 Director of the Region 1 Office of Inspection and Enforcement 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 on an annual basis shall include: (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 and their associated man rem exposure according to work and job functions, (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (described maintenance), waste processing, and refueling). The dose assignment to various duty functions may be estimates based 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 Office of Inspection and Enforcement, U. S. Nuclear Regulatory Commission, Washington, D. C. with a copy to the Region I Office 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, mail-gram, telecopy or facsimile transmission to Director of the appropriate Regional 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 Director of the appropriate Regional 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 or redundancy provided in reactor protection systems or engineered safety feature systems.
4. Abnormal degradation of systems other than those specified in items 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 Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below:

<u>Tests</u>	<u>Submittal Dates</u>
(1) Containment Structural Integrity Test - Tendon Surveillance Program	within 3 months after performance of surveillance program.

- |  |   |
|--|---|
| (2) Steam Generator Tube Inspection Program<br>(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 $\geq$ 0.005 micro-curies 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.

6.9.4.1 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 or 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 gases 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 hourly-by-hourly 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 5.1-3 and 5.1-4) 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 and 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 1.109, Rev. 1.

The radioactive effluent release reports shall include the following information for each type of solid waste shipped offsite the during 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 20.20:3 (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 present 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 change 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 5.8.2.

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 1E 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 auditable 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

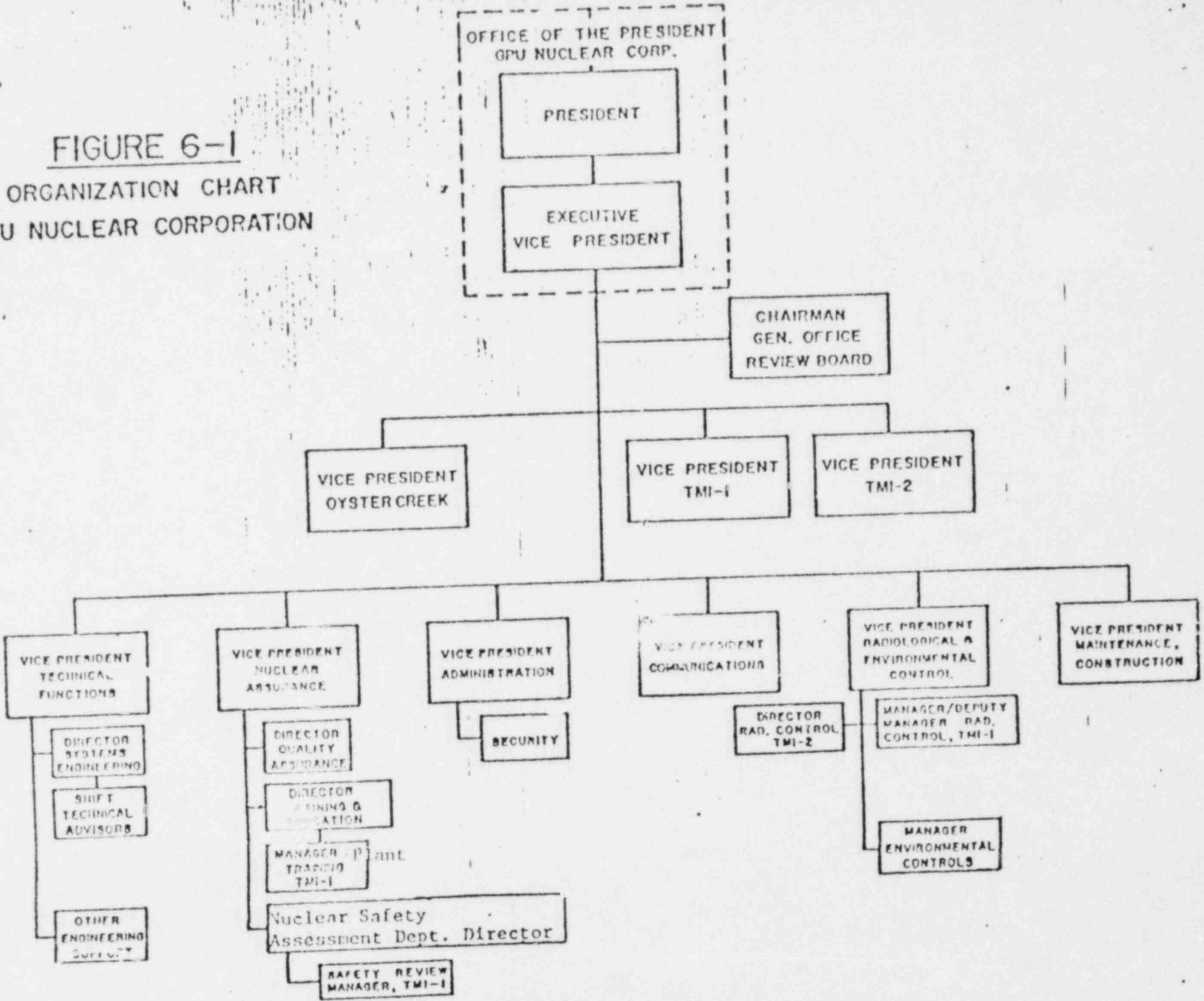
6.17.1 GPU Nuclear Corporation initiated safety related changes to the radioactive waste system (liquid, gaseous and solid):

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.

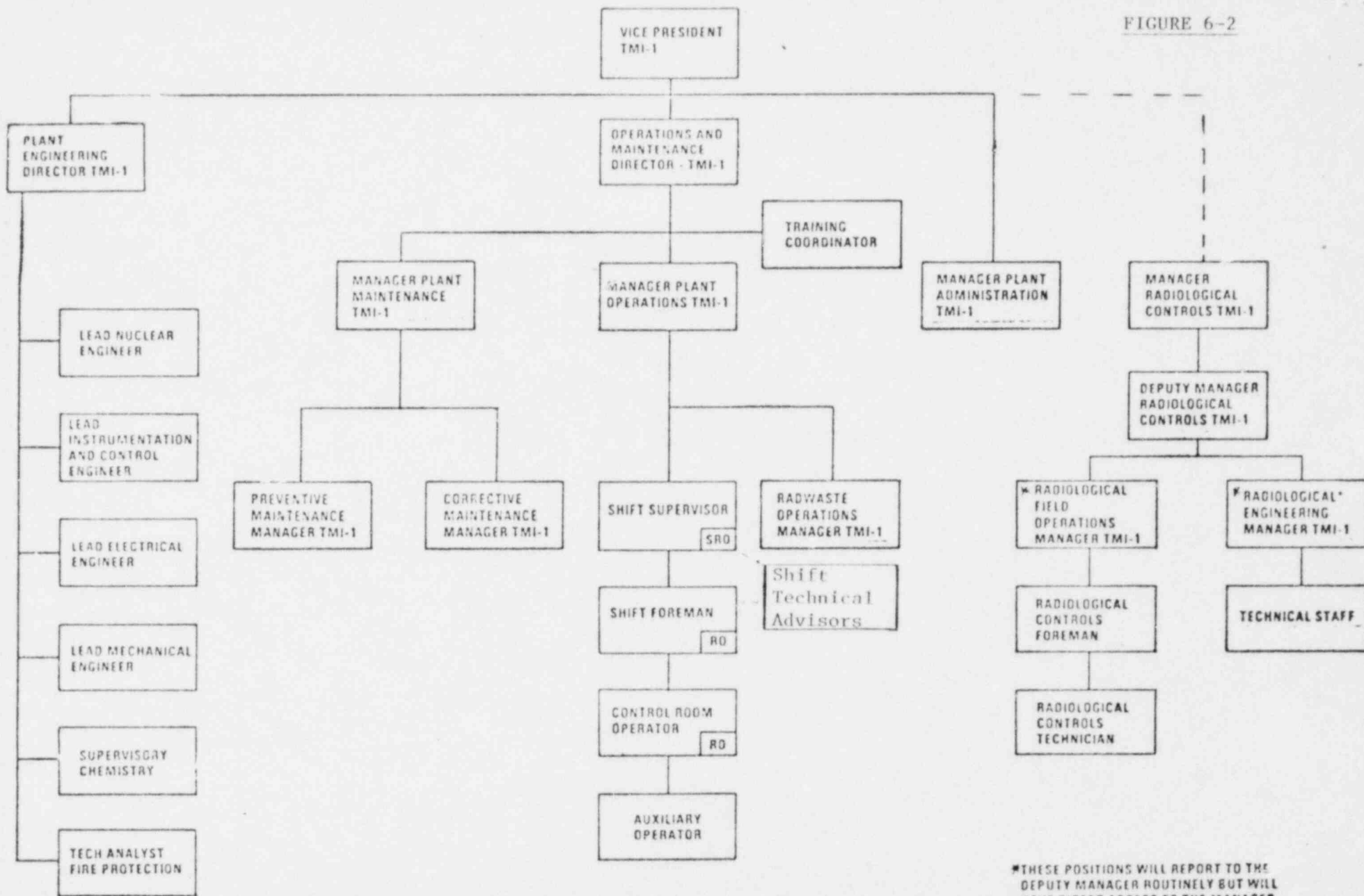
2. Shall become effective upon review and approval in accordance with Section 6.5.1. |

**FIGURE 6-1**  
**ORGANIZATION CHART**  
**GPU NUCLEAR CORPORATION**

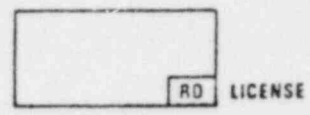


TMI-1 Unit Staff

FIGURE 6-2



\*THESE POSITIONS WILL REPORT TO THE DEPUTY MANAGER ROUTINELY BUT WILL HAVE DIRECT ACCESS TO THE MANAGER RADIOLOGICAL CONTROLS, TMI-1



APPENDIX E  
TO FACILITY OPERATING LICENSE NO. DPR-50  
THREE MILE ISLAND NUCLEAR STATION  
UNIT NO. 1

METROPOLITAN EDISON COMPANY

DOCKET NO. 50-089

ENVIRONMENTAL PROTECTION PLAN

NON-RADIOLOGICAL

THREE MILE ISLAND NUCLEAR STATION

UNIT NO. 1

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

TABLE OF CONTENTS

	Page	Page
1.0	1.0	1.0
1.1	1.1	1.1
1.2	1.2	1.2
1.3	1.3	1.3
1.4	1.4	1.4
1.5	1.5	1.5
1.6	1.6	1.6
1.7	1.7	1.7
1.8	1.8	1.8
1.9	1.9	1.9
1.10	1.10	1.10
1.11	1.11	1.11
1.12	1.12	1.12
1.13	1.13	1.13
1.14	1.14	1.14
1.15	1.15	1.15
1.16	1.16	1.16
1.17	1.17	1.17
1.18	1.18	1.18
1.19	1.19	1.19
1.20	1.20	1.20
1.21	1.21	1.21
1.22	1.22	1.22
1.23	1.23	1.23
1.24	1.24	1.24
1.25	1.25	1.25
1.26	1.26	1.26
1.27	1.27	1.27
1.28	1.28	1.28
1.29	1.29	1.29
1.30	1.30	1.30
1.31	1.31	1.31
1.32	1.32	1.32
1.33	1.33	1.33
1.34	1.34	1.34
1.35	1.35	1.35
1.36	1.36	1.36
1.37	1.37	1.37
1.38	1.38	1.38
1.39	1.39	1.39
1.40	1.40	1.40
1.41	1.41	1.41
1.42	1.42	1.42
1.43	1.43	1.43
1.44	1.44	1.44
1.45	1.45	1.45
1.46	1.46	1.46
1.47	1.47	1.47
1.48	1.48	1.48
1.49	1.49	1.49
1.50	1.50	1.50
1.51	1.51	1.51
1.52	1.52	1.52
1.53	1.53	1.53
1.54	1.54	1.54
1.55	1.55	1.55
1.56	1.56	1.56
1.57	1.57	1.57
1.58	1.58	1.58
1.59	1.59	1.59
1.60	1.60	1.60
1.61	1.61	1.61
1.62	1.62	1.62
1.63	1.63	1.63
1.64	1.64	1.64
1.65	1.65	1.65
1.66	1.66	1.66
1.67	1.67	1.67
1.68	1.68	1.68
1.69	1.69	1.69
1.70	1.70	1.70
1.71	1.71	1.71
1.72	1.72	1.72
1.73	1.73	1.73
1.74	1.74	1.74
1.75	1.75	1.75
1.76	1.76	1.76
1.77	1.77	1.77
1.78	1.78	1.78
1.79	1.79	1.79
1.80	1.80	1.80
1.81	1.81	1.81
1.82	1.82	1.82
1.83	1.83	1.83
1.84	1.84	1.84
1.85	1.85	1.85
1.86	1.86	1.86
1.87	1.87	1.87
1.88	1.88	1.88
1.89	1.89	1.89
1.90	1.90	1.90
1.91	1.91	1.91
1.92	1.92	1.92
1.93	1.93	1.93
1.94	1.94	1.94
1.95	1.95	1.95
1.96	1.96	1.96
1.97	1.97	1.97
1.98	1.98	1.98
1.99	1.99	1.99
2.00	2.00	2.00

1.0 Objectives of the Environmental Protection Plan (EPP)

The Environmental Protection Plan (EPP) is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the unit is operated in an environmentally acceptable manner as established by the EPP and other NRC environmental requirements.

...

...

...

2.0 Environmental Protection Issues

In the HIA-OLS dated December 1977, the study considered the environmental  
issues associated with the operation of the Maine Yankee Nuclear Station.  
The study considered the following issues: (1) the impact of the  
station on the environment; (2) the impact of the station on the  
community; (3) the impact of the station on the economy; (4) the  
impact of the station on the environment; (5) the impact of the  
station on the community; (6) the impact of the station on the  
economy; (7) the impact of the station on the environment; (8) the  
impact of the station on the community; (9) the impact of the station  
on the economy; (10) the impact of the station on the environment;

1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0

1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0  
1.1 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0



Aquatic issues are addressed by the effluent limitations and monitoring requirements contained in the effective NPDES permit issued by the State of Pennsylvania, Department of Environmental Resources. The NRC will rely on this agency for regulation of matters involving water quality and aquatic life.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection System. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this part, but shall be reported by Section 3.0 as required in the requirements of this part.

3.1.1 The licensee shall submit to the Commission a description of the proposed change, test or experiment, including a description of the environmental impacts of the proposed change, test or experiment, and a description of the measures to be taken to avoid, minimize, or compensate for such impacts. The description shall include, but not be limited to, the following information:

3.1.1.1 A description of the proposed change, test or experiment, including a description of the environmental impacts of the proposed change, test or experiment, and a description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.2 A description of the environmental impacts of the proposed change, test or experiment, including a description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.3 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.4 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.5 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.6 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.7 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.8 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.9 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.1.10 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2 The licensee shall submit to the Commission a description of the proposed change, test or experiment, including a description of the environmental impacts of the proposed change, test or experiment, and a description of the measures to be taken to avoid, minimize, or compensate for such impacts. The description shall include, but not be limited to, the following information:

3.1.2.1 A description of the proposed change, test or experiment, including a description of the environmental impacts of the proposed change, test or experiment, and a description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.2 A description of the environmental impacts of the proposed change, test or experiment, including a description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.3 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.4 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.5 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.6 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.7 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.8 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.9 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

3.1.2.10 A description of the measures to be taken to avoid, minimize, or compensate for such impacts.

supplements to the FIS, environmental impact, or any decision of the ASLE;  
or (2) a significant change in effluents or power level in accordance with  
10 CFR part 51.5(d)(2) which may have a significant adverse environmental  
impact or (3) a matter not previously reviewed and evaluated in the FIS,  
which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in the facility design or operation  
which may have a significant adverse environmental impact. These  
records shall include a description of the change, the date of the change, and  
the location of the change. The licensee shall also maintain records of the  
environmental impact of the change. These records shall include a description  
of the impact, the date of the impact, and the location of the impact. The  
licensee shall also maintain records of the environmental impact of the change  
on the public. These records shall include a description of the impact, the  
date of the impact, and the location of the impact. The licensee shall also  
maintain records of the environmental impact of the change on the environment.  
These records shall include a description of the impact, the date of the  
impact, and the location of the impact. The licensee shall also maintain  
records of the environmental impact of the change on the community. These  
records shall include a description of the impact, the date of the impact,  
and the location of the impact. The licensee shall also maintain records of  
the environmental impact of the change on the economy. These records shall  
include a description of the impact, the date of the impact, and the location  
of the impact. The licensee shall also maintain records of the environmental  
impact of the change on the culture. These records shall include a description  
of the impact, the date of the impact, and the location of the impact.

The licensee shall also maintain records of the environmental impact of the change  
on the environment. These records shall include a description of the impact,  
the date of the impact, and the location of the impact. The licensee shall  
also maintain records of the environmental impact of the change on the  
community. These records shall include a description of the impact, the date  
of the impact, and the location of the impact. The licensee shall also  
maintain records of the environmental impact of the change on the economy.  
These records shall include a description of the impact, the date of the  
impact, and the location of the impact. The licensee shall also maintain  
records of the environmental impact of the change on the culture. These  
records shall include a description of the impact, the date of the impact,  
and the location of the impact. The licensee shall also maintain records of  
the environmental impact of the change on the environment. These records shall  
include a description of the impact, the date of the impact, and the location  
of the impact. The licensee shall also maintain records of the environmental  
impact of the change on the community. These records shall include a  
description of the impact, the date of the impact, and the location of the  
impact. The licensee shall also maintain records of the environmental impact  
of the change on the economy. These records shall include a description of  
the impact, the date of the impact, and the location of the impact. The  
licensee shall also maintain records of the environmental impact of the change  
on the culture. These records shall include a description of the impact, the  
date of the impact, and the location of the impact.

Changes and additions to the NPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The notification of a licensee-initiated change shall include a copy of the requested revision submitted to the permitting agency. The licensee shall provide the NRC with a copy of the application for renewal of the NPDES permit at the same time the application is submitted to the permitting agency.

3.1 Changes Required for Compliance with Other Environmental Regulations

Changes in State Control or operation and performance of units or equipment may be required to achieve compliance with other Federal, State, or local environmental regulations or to adjust to the requirements of Section 3.1.

## 4.2 Environmental Conditions

### 4.2.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and promptly reported to the NRC within 24 hours by telephone, teletype, or facsimile transmission followed by a written report filed within 30 days of the event. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to remediate the condition of the event and to prevent similar occurrences, and (e) indicate the measures being taken to correct the event.

The following are examples of unusual or important events, which shall be reported to the NRC within 24 hours of occurrence, and the corrective actions to be taken to correct the event and to prevent similar occurrences:

No further information is available for this event.

5.0 Administrative Procedures

5.1 Review and Audit

The processes shall provide for review and audit of compliance with the Environmental Management System. The audits shall be conducted independently of the management of the process responsible for implementing the systems activity. A... to monitor the effectiveness of the system to achieve the objectives... the results of the audits shall be used to improve the system.

5.2 Internal Audit

The internal audit program shall be designed to verify that the Environmental Management System conforms to the requirements of the standard and that the system is effective in achieving the objectives of the system. The internal audit program shall be conducted at regular intervals and shall cover all elements of the system.

The internal audit program shall be documented and shall include the following: 1. The scope and frequency of the audits. 2. The responsibilities and authority of the auditors. 3. The procedures for conducting the audits. 4. The procedures for reporting and correcting nonconformities. 5. The procedures for monitoring the effectiveness of the corrective actions.

5.3 External Audit

The organization shall accept the audit results of external audits. The organization shall take appropriate corrective actions to address any nonconformities identified during external audits. The organization shall monitor the effectiveness of the corrective actions and shall report the results of the external audits to the management.

Implementation. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Act.

1. 7. 1977

2. 1. 1978

3. 1. 1978  
4. 1. 1978  
5. 1. 1978  
6. 1. 1978  
7. 1. 1978  
8. 1. 1978  
9. 1. 1978  
10. 1. 1978  
11. 1. 1978  
12. 1. 1978  
13. 1. 1978  
14. 1. 1978  
15. 1. 1978  
16. 1. 1978  
17. 1. 1978  
18. 1. 1978  
19. 1. 1978  
20. 1. 1978  
21. 1. 1978  
22. 1. 1978  
23. 1. 1978  
24. 1. 1978  
25. 1. 1978  
26. 1. 1978  
27. 1. 1978  
28. 1. 1978  
29. 1. 1978  
30. 1. 1978  
31. 1. 1978  
32. 1. 1978  
33. 1. 1978  
34. 1. 1978  
35. 1. 1978  
36. 1. 1978  
37. 1. 1978  
38. 1. 1978  
39. 1. 1978  
40. 1. 1978  
41. 1. 1978  
42. 1. 1978  
43. 1. 1978  
44. 1. 1978  
45. 1. 1978  
46. 1. 1978  
47. 1. 1978  
48. 1. 1978  
49. 1. 1978  
50. 1. 1978  
51. 1. 1978  
52. 1. 1978  
53. 1. 1978  
54. 1. 1978  
55. 1. 1978  
56. 1. 1978  
57. 1. 1978  
58. 1. 1978  
59. 1. 1978  
60. 1. 1978  
61. 1. 1978  
62. 1. 1978  
63. 1. 1978  
64. 1. 1978  
65. 1. 1978  
66. 1. 1978  
67. 1. 1978  
68. 1. 1978  
69. 1. 1978  
70. 1. 1978  
71. 1. 1978  
72. 1. 1978  
73. 1. 1978  
74. 1. 1978  
75. 1. 1978  
76. 1. 1978  
77. 1. 1978  
78. 1. 1978  
79. 1. 1978  
80. 1. 1978  
81. 1. 1978  
82. 1. 1978  
83. 1. 1978  
84. 1. 1978  
85. 1. 1978  
86. 1. 1978  
87. 1. 1978  
88. 1. 1978  
89. 1. 1978  
90. 1. 1978  
91. 1. 1978  
92. 1. 1978  
93. 1. 1978  
94. 1. 1978  
95. 1. 1978  
96. 1. 1978  
97. 1. 1978  
98. 1. 1978  
99. 1. 1978  
100. 1. 1978

101. 1. 1978  
102. 1. 1978  
103. 1. 1978  
104. 1. 1978  
105. 1. 1978  
106. 1. 1978  
107. 1. 1978  
108. 1. 1978  
109. 1. 1978  
110. 1. 1978  
111. 1. 1978  
112. 1. 1978  
113. 1. 1978  
114. 1. 1978  
115. 1. 1978  
116. 1. 1978  
117. 1. 1978  
118. 1. 1978  
119. 1. 1978  
120. 1. 1978  
121. 1. 1978  
122. 1. 1978  
123. 1. 1978  
124. 1. 1978  
125. 1. 1978  
126. 1. 1978  
127. 1. 1978  
128. 1. 1978  
129. 1. 1978  
130. 1. 1978  
131. 1. 1978  
132. 1. 1978  
133. 1. 1978  
134. 1. 1978  
135. 1. 1978  
136. 1. 1978  
137. 1. 1978  
138. 1. 1978  
139. 1. 1978  
140. 1. 1978  
141. 1. 1978  
142. 1. 1978  
143. 1. 1978  
144. 1. 1978  
145. 1. 1978  
146. 1. 1978  
147. 1. 1978  
148. 1. 1978  
149. 1. 1978  
150. 1. 1978  
151. 1. 1978  
152. 1. 1978  
153. 1. 1978  
154. 1. 1978  
155. 1. 1978  
156. 1. 1978  
157. 1. 1978  
158. 1. 1978  
159. 1. 1978  
160. 1. 1978  
161. 1. 1978  
162. 1. 1978  
163. 1. 1978  
164. 1. 1978  
165. 1. 1978  
166. 1. 1978  
167. 1. 1978  
168. 1. 1978  
169. 1. 1978  
170. 1. 1978  
171. 1. 1978  
172. 1. 1978  
173. 1. 1978  
174. 1. 1978  
175. 1. 1978  
176. 1. 1978  
177. 1. 1978  
178. 1. 1978  
179. 1. 1978  
180. 1. 1978  
181. 1. 1978  
182. 1. 1978  
183. 1. 1978  
184. 1. 1978  
185. 1. 1978  
186. 1. 1978  
187. 1. 1978  
188. 1. 1978  
189. 1. 1978  
190. 1. 1978  
191. 1. 1978  
192. 1. 1978  
193. 1. 1978  
194. 1. 1978  
195. 1. 1978  
196. 1. 1978  
197. 1. 1978  
198. 1. 1978  
199. 1. 1978  
200. 1. 1978

201. 1. 1978  
202. 1. 1978  
203. 1. 1978  
204. 1. 1978  
205. 1. 1978  
206. 1. 1978  
207. 1. 1978  
208. 1. 1978  
209. 1. 1978  
210. 1. 1978  
211. 1. 1978  
212. 1. 1978  
213. 1. 1978  
214. 1. 1978  
215. 1. 1978  
216. 1. 1978  
217. 1. 1978  
218. 1. 1978  
219. 1. 1978  
220. 1. 1978  
221. 1. 1978  
222. 1. 1978  
223. 1. 1978  
224. 1. 1978  
225. 1. 1978  
226. 1. 1978  
227. 1. 1978  
228. 1. 1978  
229. 1. 1978  
230. 1. 1978  
231. 1. 1978  
232. 1. 1978  
233. 1. 1978  
234. 1. 1978  
235. 1. 1978  
236. 1. 1978  
237. 1. 1978  
238. 1. 1978  
239. 1. 1978  
240. 1. 1978  
241. 1. 1978  
242. 1. 1978  
243. 1. 1978  
244. 1. 1978  
245. 1. 1978  
246. 1. 1978  
247. 1. 1978  
248. 1. 1978  
249. 1. 1978  
250. 1. 1978  
251. 1. 1978  
252. 1. 1978  
253. 1. 1978  
254. 1. 1978  
255. 1. 1978  
256. 1. 1978  
257. 1. 1978  
258. 1. 1978  
259. 1. 1978  
260. 1. 1978  
261. 1. 1978  
262. 1. 1978  
263. 1. 1978  
264. 1. 1978  
265. 1. 1978  
266. 1. 1978  
267. 1. 1978  
268. 1. 1978  
269. 1. 1978  
270. 1. 1978  
271. 1. 1978  
272. 1. 1978  
273. 1. 1978  
274. 1. 1978  
275. 1. 1978  
276. 1. 1978  
277. 1. 1978  
278. 1. 1978  
279. 1. 1978  
280. 1. 1978  
281. 1. 1978  
282. 1. 1978  
283. 1. 1978  
284. 1. 1978  
285. 1. 1978  
286. 1. 1978  
287. 1. 1978  
288. 1. 1978  
289. 1. 1978  
290. 1. 1978  
291. 1. 1978  
292. 1. 1978  
293. 1. 1978  
294. 1. 1978  
295. 1. 1978  
296. 1. 1978  
297. 1. 1978  
298. 1. 1978  
299. 1. 1978  
300. 1. 1978

(1) A list of all changes in station design or operation, tests and experiments made in accordance with Subsection 3.1 which involved a potentially significant site-level environmental issue.

(2) A list of all corrective reports submitted in accordance with Subsection 3.1.3

(3) A list of all corrective reports submitted in accordance with Subsection 3.1.3

(4) A list of all corrective reports submitted

(5) A list of all corrective reports submitted