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

December 28, 1993

Docket No. 50-320

Dr. Robert L. Long
Director, Corporate Services/
Director TMI-2
GPU Nuclear Corporation
Post Office Box 480
Middletown, Pennsylvania 17057-1398

Dear Dr. Long:

SUBJECT: ISSUANCE OF AMENDMENT NO. 48 FOR POSSESSION ONLY LICENSE NO. DPR-73 FOR THREE MILE ISLAND NUCLEAR STATION UNIT 2 (TAC NO. M69115)

The Commission has issued the enclosed Amendment No. 48 to Possession Only License No. DPR-73 for the Three Mile Island Nuclear Station Unit 2 (TMI-2). This amendment extensively modifies the TMI-2 Appendix A and B Technical Specifications consistent with your plans for post-defueling monitoring storage of the facility. This amendment is in response to your application of August 16, 1988 as revised by submittals dated September 19, 1988, February 9, 1989, March 31, 1989, June 26, 1989, October 10, 1989, November 22, 1989, June 21, 1990, October 15, 1990, November 7, 1990, February 19, 1991, April 19, 1991, June 21, 1991, August 28, 1991, October 9, 1991, January 13, 1992, January 18, 1993, May 28, 1993, October 24, 1993, and November 12, 1993.

Due to the extensive modification, the Appendix A and B Technical Specifications are reissued in their entirety. You should discard all existing copies and replace with a copy of the enclosed PDMS Technical Specifications for TMI-2. The revised pages of the enclosed PDMS Technical Specifications are identified by amendment number. These revised Technical Specifications are effective upon issuance.





DF03

The staff has updated the Safety Evaluation (SE) that was initially issued for this license amendment on February 20, 1992. The SE has been updated to reflect license amendments issued since February 20, 1992, correct minor typographic errors, and includes the proposed unfiltered leak rate test that was not completely developed at the time the original SE was issued. A copy of the updated SE with change bars is enclosed. Notice of Issuance will be included in the Commission biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY

Michael T. Masnik, Senior Project Manager
Non-Power Reactors and Decommissioning
Project Directorate
Division of Operating Reactor Support
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 48 to License No. DPR-73
2. Safety Evaluation

cc w/enclosures:
See next page

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050031

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1. Amendment No. 48 to
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cc w/enclosures:
See next page

Dr. R. L. Long
GPU Nuclear Corporation Unit No. 2

Three Mile Island Nuclear Station
Docket No. 50-320

cc:

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

Dr. Judith H. Johnsrud
Environmental Coalition on Nuclear Power
433 Orlando Avenue
State College, Pennsylvania 16801

Ernest L. Blake, Jr., Esq.
Shaw, Pittman, Potts, and Trowbridge
2300 N Street, N.W.
Washington, D.C. 20037

Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Russell Schaeffer, Chairperson
Dauphin County Board of Commissioners
Dauphin County Courthouse
Front and Market Streets
Harrisburg, Pennsylvania 17120

William Dornsife, Acting Director
Bureau of Radiation Protection
Department of Environmental Resources
P. O. Box 2063
Harrisburg, Pennsylvania 17120

Mr. Ad Crable
Lancaster New Era
8 West King Street
Lancaster, Pennsylvania 17601

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

Mr. Frank F. Hooper
4155 Clark Road
Ann Arbor, Michigan 48104

Peter B. Bloch, Chairman
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Robert Rogan
GPU Nuclear Corporation
P. O. Box 480
Middletown, Pennsylvania 17057

Mr. David J. McGoff
Office of LWR Safety and Technology
NE-23
U.S. Department of Energy
Washington, D.C. 20545

Mr. Wythe Keever
The Patriot
812 Market Street
Harrisburg, Pennsylvania 17105

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

Mr. Marvin I. Lewis
7801 Roosevelt Blvd. #62
Philadelphia, Pennsylvania 19152

Mr. Jane Lee
183 Valley Road
Etters, Pennsylvania 17319

Mr. Walter W. Cohen, Consumer Advocate
Department of Justice
Strawberry Square, 14th Floor
Harrisburg, Pennsylvania 17127

U.S. Environmental Prot. Agency
Region III Office
ATTN: EIS Coordinator
841 Chestnut Street
Philadelphia, Pennsylvania 19107

Mr. Charles N. Kelber
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

GPU NUCLEAR CORPORATION

DOCKET NO. 50-320

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

POSSESSION ONLY LICENSE

Amendment No. 48
License No. DPR-73

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

   A. The application for amendment filed by GPU Nuclear Corporation (the licensee) dated August 16, 1988, as supplemented by submittals dated September 19, 1988, February 9, 1989, March 31, 1989, June 26, 1989, October 10, 1989, November 22, 1989, June 21, 1990, October 15, 1990, November 7, 1990, February 19, 1991, April 19, 1991, June 21, 1991, August 28, 1991, October 9, 1991, January 13, 1992, January 18, 1993, May 28, 1993, October 24, 1993, and November 12, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission as set forth in 10 CFR Chapter I;

   B. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations of the Commission;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the regulations of the Commission and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C(1) of Possession Only License No. DPR-73 is hereby amended to read as follows:

   (1) Technical Specifications

   The Technical Specifications, as revised through Amendment No. 48, are hereby incorporated into this license. The licensee shall maintain the facility in accordance with the Technical Specifications and all Commission Orders issued subsequent to the date of the possession only license.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Seymour H. Weiss

Seymour H. Weiss, Director
Non-Power Reactors and Decommissioning
Project Directorate
Division of Operating Reactor Support
Office of Nuclear Reactor Regulation

Enclosure:
Technical Specifications

Date of Issuance: December 28, 1993

# TECHNICAL SPECIFICATIONS

# FOR

# POST-DEFUELING MONITORED STORAGE

# (PDMS)

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ADMINISTRATIVE CONTROLS

# SECTION 1.0

# DEFINITIONS

## 1.0 DEFINITIONS

### DEFINED TERMS

1.1 The DEFINED TERMS of this section appear in capitalized type and are applicable throughout these Technical Specifications.

### POST-DEFUELING MONITORED STORAGE

1.2 POST-DEFUELING MONITORED STORAGE (PDMS) is that condition where TMI-2 defueling has been completed, the core debris removed from the reactor during the cleanup period has been shipped off-site and the facility has been placed in a stable, safe, and secure condition.

### ACTION

1.3 ACTION shall be those additional requirements specified as corollary statements to each specification and shall be part of the specifications.

### OPERABLE - OPERABILITY

1.4 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s) and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).

### CHANNEL CALIBRATION

1.5 An instrument CHANNEL CALIBRATION is a test, and adjustment, as necessary, to establish that the channel output responds with acceptable range and accuracy to known values of the parameter which the channel measures or an accurate simulation of these values. CHANNEL CALIBRATION shall encompass the entire channel including equipment activation, alarm or trip, and shall be deemed to include the CHANNEL FUNCTIONAL TEST.

### CHANNEL CHECK

1.6 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

### CHANNEL FUNCTIONAL TEST

1.7 A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

FREQUENCY NOTATION

1.8 The FREQUENCY NOTATION specified for the performance of surveillance requirements shall correspond to the intervals defined in Table 1.1.

CONTAINMENT ISOLATION

1.9 CONTAINMENT ISOLATION shall exist when:

a. Each penetration is:

1. Closed by a manual valve, a welded or bolted blind flange, a deactivated automatic valve secured in the closed position or other equivalent mechanical closure to provide isolation of each penetration, or

2. Open and the pathway to the environment provided with a HEPA filter, or

3. Open in accordance with approved procedures. Controls shall be implemented to minimize the time the penetration is allowed open and to specify the conditions for which the penetration is open. Penetrations shall be expeditiously closed upon completion of the conditions specified in the approved procedures, and

b. The Equipment Hatch is closed, and

c. Each Containment Airlock is operable pursuant to Technical Specification 3.1.1.3.

BATCH RELEASE

1.10 A BATCH RELEASE is the discharge of a discrete volume.

CONTINUOUS RELEASE

1.11 A CONTINUOUS RELEASE is the discharge of a non-discrete volume, e.g., from a volume or system that has an input flow during the continuous release.

OFF-SITE DOSE CALCULATION MANUAL

1.12 The OFF-SITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of off-site doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the programs required by Section 6.7.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.8.1.2 and 6.8.1.3.

REPORTABLE EVENTS

1.13 A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 of 10 CFR Part 50.

STAGGERED TEST BASIS

1.14 A STAGGERED TEST BASIS shall consist of:

a. A test schedule for n systems, subsystems, trains or designated components obtained by dividing the specified test interval into n equal subintervals,

b. The testing of one system, subsystem, train or designated components at the beginning of each subinterval.

SUBSTANTIVE CHANGES

1.15 SUBSTANTIVE CHANGES are those which affect the activities associated with a document or the document's meaning or intent. Examples of non-substantive changes are: (1) correcting spelling; (2) adding (but not deleting) sign-off spaces; (3) blocking in notes, cautions, etc.; (4) changes in corporate and personnel titles which do not reassign responsibilities and which are not referenced in the PDMS Technical Specifications; and (5) changes in nomenclature or editorial changes which clearly do not change function, meaning or intent.

MEMBER(S) OF THE PUBLIC

1.16 MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the GPU System, GPU contractors or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries.

UNRESTRICTED AREA

1.17 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by GPU Nuclear for purposes of protection of individuals from exposure to radiation and radioactive materials, or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes.

SITE BOUNDARY

1.18 The SITE BOUNDARY shall be that line beyond which the land is neither owned, nor leased, nor otherwise controlled by GPU Nuclear. The SITE BOUNDARY for gaseous and liquid effluents shall be as shown in the ODCM.

NPDES PERMIT

1.19 The NPDES PERMIT is the National Pollutant Discharge Elimination System (NPDES) Permit No. PA0009920, effective January 30, 1975, issued by the Environmental Protection Agency to Metropolitan Edison Company. This permit authorized Metropolitan Edison Company to discharge controlled waste water from TMI Nuclear Station into the waters of the Commonwealth of Pennsylvania.

## TABLE 1.1

## FREQUENCY NOTATION

| NOTATION | FREQUENCY |
|---|---|
| S | At least once per 12 hours. |
| D | At least once per 24 hours. |
| W | At least once per 7 days. |
| M | At least once per 31 days. |
| Q | At least once per 92 days. |
| SA | At least once per 184 days. |
| A | At least once per 12 months. |
| R | At least once per 18 months. |
| P | Completed prior to each release. |
| N/A | Not applicable. |

# SECTION 2.0

# SAFETY LIMITS

## 2.0 SAFETY LIMITS

There are no safety limits which apply to TMI-2 during PDMS.

# SECTION 3/4

# LIMITING CONDITIONS FOR PDMS

# AND

# SURVEILLANCE REQUIREMENTS

## 3/4.0 LIMITING CONDITIONS FOR PDMS AND SURVEILLANCE REQUIREMENTS

### 3/4.0 APPLICABILITY

### LIMITING CONDITIONS FOR PDMS

3.0.1 Limiting Conditions for PDMS and ACTION requirements shall be applicable during POST-DEFUELING MONITORED STORAGE or other conditions specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for PDMS and/or associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for PDMS is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for PDMS and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, initiate appropriate actions to rectify the problem to the extent possible under the circumstances and submit a report to the Commission pursuant to the requirements of 10 CFR 50.73.

### SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be met during PDMS or other conditions specified for individual Limiting Conditions for PDMS unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

a. A maximum allowable extension not to exceed 25% of the surveillance interval, and

b. A total maximum combined interval time for any four consecutive tests not to exceed 3.25 times the specified surveillance interval.

4.0.3 Failure to perform a Surveillance Requirement within the specified time interval shall constitute a failure to meet the OPERABILITY requirements for a Limiting Condition for PDMS. Exceptions to these requirements are stated in the individual Specifications. Surveillance Requirements do not have to be performed on inoperable equipment.

## 3/4.1 CONTAINMENT SYSTEMS

### 3/4.1.1 PRIMARY CONTAINMENT

### CONTAINMENT ISOLATION

### LIMITING CONDITIONS FOR PDMS

3.1.1.1 Primary CONTAINMENT ISOLATION shall be maintained.

APPLICABILITY: PDMS

ACTION:

With CONTAINMENT ISOLATION not in accordance with requirements, restore CONTAINMENT ISOLATION within 24 hours.

### SURVEILLANCE REQUIREMENTS

4.1.1.1 Primary CONTAINMENT ISOLATION shall be verified quarterly with the following exceptions:

a. Isolation valves that are locked closed shall be verified annually on a quarterly STAGGERED TEST BASIS. If a valve is found to be out of position, a check of all locked closed isolation valves shall be performed.

b. An independent verification of all isolation valve position changes shall be performed.

c. Bolted or welded blind flanges which form a containment isolation boundary and the Equipment Hatch shall be visually inspected for signs of degradation and/or leakage every five years on an annual STAGGERED TEST BASIS. If a problem is discovered with a flange, a check of all bolted or welded blind flanges shall be performed.

UNFILTERED LEAK RATE TESTING

LIMITING CONDITIONS FOR PDMS

3.1.1.2 The unfiltered leak rate from Containment with the RB Breather closed shall be less than 1/100 of the rate through the RB Breather.

APPLICABILITY: PDMS

ACTION:

If the unfiltered leak rate from Containment with the RB Breather closed is greater than 1/100 of the rate through the RB Breather or if the trend indicates that the 1/100 value will be exceeded within one year, then:

a. Identify the excessive leakage path;

b. Make necessary repairs and/or adjustments;

c. Perform an additional unfiltered leak rate test; and

d. Prepare and submit a special report to the Commission pursuant to Specification 6.8.2 within the next 30 days.

SURVEILLANCE REQUIREMENTS

4.1.1.2 The initial unfiltered leak rate test shall be performed two years following entry into PDMS. After the initial unfiltered leak rate test, the test frequency will be determined by comparing the ratios of the unfiltered leak rate to the RB Breather leak rate from previous and current tests. If the test results indicate that the ratio of unfiltered leakage to breather leakage is remaining constant or decreasing, then the next interval shall be five years.

4.1.1.2 (con't)

If the test results indicate that the ratio of unfiltered leakage to breather leakage is increasing, i.e., the current ratio is greater than the previous ratio, then the next interval shall be determined by the following equation:

$$N' = N \times \left[ \frac{(0.01 - R_p)}{(R_c - R_p)} - 1 \right]$$

where:

| | | |
|---|---|---|
| N' | = | the next test interval, |
| N | = | the current test interval, |
| $R_p$ | = | the previous ratio of unfiltered leakage to RB Breather leakage |
| $R_c$ | = | the current ratio of unfiltered leakage to RB Breather leakage |

The initial value of N shall equal two years. N' shall be the truncated integer result from the above equation, in years, but not more than five years nor less than one year.

Only ratios for successful tests shall be used to determine the next test interval in the above equation. Following a failed test the next test interval shall be one year.

CONTAINMENT AIR LOCKS

LIMITING CONDITIONS FOR PDMS

3.1.1.3 Each Containment Air Lock shall be OPERABLE with at least one door closed except when the air lock is being used for transit entry and exit in accordance with site-approved procedures.

APPLICABILITY: PDMS

ACTION:

With no Containment Air Lock door OPERABLE, restore at least one door to OPERABLE status within 24 hours.

SURVEILLANCE REQUIREMENTS

4.1.1.3 Each Containment Air Lock shall be demonstrated OPERABLE at least once per three months by performing a mechanical operability check of each Air Lock Door, including a visual inspection of the components and lubrication if necessary and by visually inspecting the door seals for significant degradation. When both Containment Air Lock doors are opened simultaneously, verify the following conditions:

a. The capability exists to expeditiously close at least one Air Lock door;

b. The Air Lock doors and Containment Purge are configured to restrict the outflow of air in accordance with site-approved procedures; and

c. The Air Lock doors are cycled to ensure mechanical operability within seven days prior to opening both doors.

## 3/4.2 REACTOR VESSEL FUEL

### 3/4.2.1 REACTOR VESSEL FUEL REMOVAL/REARRANGEMENT

LIMITING CONDITIONS FOR PDMS

3.2.1.1 No more than 42 kg of fuel (i.e., $UO_2$) may be removed from the Reactor Vessel without prior NRC approval.

APPLICABILITY: PDMS

ACTION:

When more than 42 kg of fuel has been removed from the Reactor Vessel, suspend all further fuel removal activities and submit a safety analysis to the NRC for approval of this activity and any further fuel removal activities.

3.2.1.2 No more than 42 kg of fuel in the Reactor Vessel may be rearranged outside the geometries analyzed in the Defueling Completion Report and the criticality safety analyses contained in GPU Nuclear letter C312-92-2080, dated December 18, 1992, without prior NRC approval.

APPLICABILITY: PDMS

ACTION:

When more than 42 kg of fuel in the Reactor Vessel has been rearranged, suspend all further fuel rearrangement activities and submit a safety analysis to the NRC for approval of this activity and any further fuel rearrangement activities. If an external event were to occur that could potentially cause more than 42 kg of fuel in the Reactor Vessel to be rearranged, a report will be submitted to the NRC detailing the findings of any investigation into that potential rearrangement.

SURVEILLANCE REQUIREMENTS

4.2.1.1 None required as long as no fuel is removed from the Reactor Vessel.

4.2.1.2 None required as long as no fuel in the Reactor Vessel is rearranged.

## 3/4.3 CRANE OPERATIONS

### LIMITING CONDITIONS FOR PDMS

3.3.1 Loads in excess of 50,000 lbs. shall be prohibited from travel over the Reactor Vessel unless a docketed Safety Evaluation for the activity is approved by the NRC.

APPLICABILITY: PDMS

ACTION:

With the requirements of the above specification not satisfied, place the crane load in a safe condition and correct the circumstances which caused or allowed the Limiting Condition for PDMS to be exceeded prior to continuing crane operations limited by Specification 3.3.1. Prepare and submit a special report to the Commission pursuant to Specification 6.8.2 within the next 30 days.

## 3/4.4 SEALED SOURCES

### 3/4.4.1 SEALED SOURCE INTEGRITY

### LIMITING CONDITIONS FOR PDMS

3.4.1 Each sealed source containing radioactive material either in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material (except as noted in 4.4.1.2) shall be free of $\geq$ 0.005 microcuries of removable contamination.

APPLICABLE: PDMS

ACTION:

a. Each sealed source with removable contamination in excess of the above limit shall be immediately withdrawn from use and:

   1. Either decontaminate and repair, or

   2. Dispose in accordance with Commission Regulations.

b. The provisions of Specification 3.0.3 are not applicable.

### SURVEILLANCE REQUIREMENTS

TEST REQUIREMENTS

4.4.1.1 Each sealed source shall be tested for leakage and/or contamination by:

   a. The licensee, or

   b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

TEST FREQUENCIES

4.4.1.2 Each category of sealed source shall be tested at the frequency described below.

   a. Source in use (excluding fission detectors previously subjected to core flux) - At least once per six months for all sealed sources containing radioactive material:

      1. With a half-life greater than 30 days (excluding Hydrogen 3) and

      2. In any form other than gas.

SURVEILLANCE REQUIREMENTS

b. Stored sources not in use - Each sealed source and fission detector shall be tested prior to use or transfer to another licensee unless tested within the previous six months. Sealed sources and fission detectors transferred without a certificate indicating the last test date shall be tested prior to being placed into use.

c. Fission detectors - Each sealed fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.

REPORTS

4.4.1.3 A report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of $\geq 0.005$ microcuries of removable contamination.

# BASES

# FOR

# LIMITING CONDITIONS FOR PDMS

# AND

# SURVEILLANCE REQUIREMENTS

NOTE

The summary statements contained in this section provide the bases for the Specifications of Section 3.0 and 4.0 and are not considered a part of these Technical Specifications as provided in 10 CFR 50.36.

## 3/4.0 APPLICABILITY

## BASES

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for PDMS and Surveillance Requirements within Section 3/4.

3.0.1 This specification defines the applicability of each specification in terms of PDMS or other specified conditions and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for PDMS and associated ACTION requirement.

3.0.3 The specification defines the action and reporting requirements for those circumstances where the ACTION statement for Limiting Conditions for PDMS was exceeded.

4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for PDMS are met and will be performed during the condition for which the Limiting Conditions for PDMS are applicable.

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities.

The tolerance values, taken either individually or consecutively over 3 test intervals, are sufficiently restrictive to ensure that the reliability associated with the surveillance activity is not degraded beyond that obtained from the nominal specified interval.

4.0.3 The provisions of this specification set forth the criteria for determination of compliance with the OPERABILITY requirements of the Limiting Conditions for PDMS. Under this criteria, equipment, systems or components are assumed to be OPERABLE if the associated surveillance activities have been satisfactorily performed within the specified time interval. Nothing in this provision is to be construed as defining equipment, systems or components OPERABLE, when such items are found or known to be inoperable although still meeting the Surveillance Requirements.

BASES

## 3/4.1.1 PRIMARY CONTAINMENT

### 3/4.1.1.1 CONTAINMENT ISOLATION

CONTAINMENT ISOLATION is maintained to assure the Containment is properly maintained as a contamination barrier for the residual contamination which remains inside the Containment. One barrier either outside or inside of the Containment on each penetration is acceptable. See the PDMS SAR Section 7.2.1.1. Verification of CONTAINMENT ISOLATION is primarily accomplished by visual inspection; however, in cases where this is not practical due to the valve or valves being located in a locked high radiation area, documented evidence of the valves closure may be used. Penetrations which have been isolated by chain locked valves provide a high degree of assurance that CONTAINMENT ISOLATION is being maintained and, therefore, require only annual surveillance on a STAGGERED TEST BASIS. Penetrations which have been closed by bolted or welded blind flanges provide an even higher degree of assurance that CONTAINMENT ISOLATION is being maintained and, therefore, require surveillance only every five years also on a STAGGERED TEST BASIS. However, if a valve is found out of position or a problem with a flange is discovered, a complete verification check would be performed to provide assurance that CONTAINMENT ISOLATION is being maintained.

### 3/4.1.1.2 UNFILTERED LEAK RATE TESTING

The Reactor Building fire analysis presented in SAR Section 8.2.5 Case 3 assumes that the mass flowrate of unfiltered leakage is less than 1/100 of the mass flowrate released through the 99% efficient RB Breather HEPA filter. SAR Section 7.2.1.2.3 provides the details of the calculation using an unfiltered leak rate test to demonstrate compliance with this Limiting Condition for PDMS. The test interval is variable due to the uncertainty inherent in maintaining the unfiltered leakage to a small fraction of the leakage through the RB Breather.

### 3/4.1.1.3 CONTAINMENT AIR LOCKS

The Containment Air Locks must be maintained OPERABLE to provide CONTAINMENT ISOLATION. These air locks will be used during entries into the Containment to ensure that radioactive materials are not unnecessarily being released to the environs. The preferred method for ensuring that radioactive materials are not released during these entries is to maintain at least one door closed at all times; however, if circumstances require, both doors may be open simultaneously in accordance with site-approved procedures.

## 3/4.2 REACTOR VESSEL FUEL

## BASES

### 3/4.2.1 REACTOR VESSEL FUEL REMOVAL/REARRANGEMENT

NRC Inspection Report 50-320/90-03, dated June 14, 1990, imposed restrictions on the removal and/or rearrangement of the residual fuel in the Reactor Vessel. In particular, the NRC stated in Section 3.0, "Safe Fuel Mass Limit," of that inspection report that the appropriate safe fuel mass limit in the Reactor Vessel (RV) was determined to be 93 kg of core debris. Based on industry practice, a limit of approximately 45% of the SFML was placed on the amount of core debris that may be removed from the RV or rearranged in the RV. This limit is specified to ensure subcriticality even after dual errors. Thus, if the fuel in the RV is rearranged outside the analyzed geometries used in the Defueling Completion Report or the criticality safety analyses contained in GPU Nuclear letter C312-92-2080, dated December 18, 1992, the 42 kg limit will apply to the rearranged fuel. Further, if any fuel is removed from the RV in the future, the 42 kg limit will also apply to that fuel.

## 3/4.3 CRANE OPERATIONS

### BASES

A load drop into the RV may cause reconfiguration of the core debris outside the analyzed geometries used in the Defueling Completion Report RV criticality analysis.

## 3/4.4 SEALED SOURCES

## BASES

### 3/4.4.1 SEALED SOURCE INTEGRITY

The limitation on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and Special Nuclear Material sources will not exceed allowable intake values.

# SECTION 5.0

# DESIGN FEATURES

## 5.0 DESIGN FEATURES

### 5.1 CONTAINMENT

#### CONFIGURATION

5.1.1 The Containment Building is a steel lined, reinforced concrete building of cylindrical shape, with a dome roof and having the following design features:

a. Nominal inside diameter = 130 feet.

b. Nominal inside height = 157 feet.

c. Minimum thickness of concrete walls = 4 feet.

d. Minimum thickness of concrete roof = 3.5 feet.

e. Minimum thickness of concrete floor pad = 13.5 feet.

f. Nominal thickness of steel liner = 1/2 inch.

g. Net free volume = $2.1 \times 10^6$ cubic feet.

h. Design Pressure = 5.0 psig.

# SECTION 6.0

# ADMINISTRATIVE CONTROLS

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

6.1.1 The PDMS Manager is responsible for the management of overall unit operations at Unit 2 and shall delegate in writing the succession to this responsibility during absence.

### 6.2 ORGANIZATION

#### GPU NUCLEAR ORGANIZATION

6.2.1 The GPU Nuclear Corporation (GPUNC) organization for unit management and technical support shall be as in Section 10.5 of the PDMS SAR.

#### TMI-2 ORGANIZATION

6.2.2 The unit organization shall be as described in Section 10.5 of the PDMS SAR and an individual qualified in radiation protection procedures shall be on site whenever Radioactive Waste Management activities are in progress.

### 6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions unless otherwise noted in the Technical Specifications. The requirements of ANSI N18.1-1971 that pertain to operator license qualifications for unit staff shall not apply.

6.3.2 The management position responsible for radiological control or his deputy shall meet or exceed the qualifications of Regulatory Guide 1.8 of 1977. Each Radiological Controls Technician in a responsible position shall meet or exceed the qualifications of ANSI N18.1-1971, paragraphs 4.5.2 or 4.3.2, or be formally qualified through an NRC-approved TMI 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.

### 6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained and shall meet or exceed the requirements and recommendations of Regulatory Guide 1.8 of 1977.

## 6.5 REVIEW AND AUDIT

### 6.5.1 TECHNICAL REVIEW AND CONTROL

The Vice President of each division within GPU Nuclear Corporation shall be responsible for ensuring the preparation, review, and approval of documents required by the activities described in Sections 6.5.1.1 through 6.5.1.7 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 Section 6.7 and other procedures including those for tests and experiments and SUBSTANTIVE CHANGES thereto shall be prepared by a designated individual(s) or group knowledgeable in the area affected by the procedure. Each such procedure, and SUBSTANTIVE CHANGES thereto, shall be given a technical review by an individuals(s) or group other than the preparer, but who may be from the same organization as the individual who prepared the procedure or change.

6.5.1.2 Proposed changes to the Technical Specifications shall be reviewed by a knowledgeable individual(s) or group other than the individual(s) or group who prepared the change.

6.5.1.3 Proposed tests and experiments shall be reviewed by a knowledgeable individual(s) or group other than the preparer but who may be from the same division as the individual who prepared the tests and experiments.

6.5.1.4 Proposed modifications to unit structures, systems, and components necessary to maintain the PDMS condition as described in the PDMS SAR shall be designed by an individual/organization knowledgeable in the areas affected by the proposed modification. Each such modification shall be technically reviewed by an individual/group other than the individual/group which designed the modification but may be from the same group as the individual who designed the modification.

6.5.1.5 Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, shall be reviewed by a knowledgeable individual(s)/group other than the individual/group which performed the investigation.

6.5.1.6 All REPORTABLE EVENTS shall be reviewed by an individual/group other than the individual/group which prepared the report.

6.5.1.7 Individuals responsible for reviews performed in accordance with Sections 6.5.1.1 through 6.5.1.6 shall include a determination of whether or not additional cross disciplinary review is necessary. If deemed necessary, such review shall

ACTIVITIES (con't)

be performed by the appropriate personnel. Individuals responsible for reviews considered under Sections 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

6.5.1.8 Written records of activities performed in accordance with Sections 6.5.1.1 through 6.5.1.7 shall be maintained in accordance with Section 6.9.

QUALIFICATIONS

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

6.5.2 INDEPENDENT SAFETY REVIEW

FUNCTION

6.5.2.1 The Vice President of each division within GPU Nuclear Corporation shall be responsible for ensuring the independent safety review of the subjects described in Section 6.5.2.5 within his assigned area of review responsibility, as assigned in the GPUN Review and Approval Matrix.

6.5.2.2 Independent safety review shall be completed by an individual or 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 or 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 Unit operations
b. Nuclear engineering
c. Chemistry and radiochemistry
d. Metallurgy

FUNCTION (con't)

e. Instrumentation and control
f. Radiological safety
g. Mechanical engineering
h. Electrical engineering
i. Administrative controls and quality assurance practices
j. Other appropriate fields such as radioactive waste management operations associated with the unique characteristics of TMI-2.

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 Independent Safety Reviewers (ISRs) in 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 10 CFR 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 10 CFR 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 10 CFR 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 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.

RESPONSIBILITIES (con't)

e. Written summaries of audit reports in the areas specified in Section 6.5.3.

f. Any other matters involving the plant which a reviewer deems appropriate for consideration or which is referred to the independent reviewers.

QUALIFICATIONS

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

RECORDS

6.5.2.7 Reports of reviews encompassed in Section 6.5.2.5 shall be maintained in accordance with Section 6.9.

6.5.3 AUDITS

6.5.3.1 Audits of unit activities shall be performed in accordance with the TMI-2 PDMS QA Plan. These audits shall encompass:

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

b. The performance of activities required by the PDMS QA Plan. The audit frequency shall be at least once per 24 months.

c. The Radiation Protection Plan and applicable implementing procedures. The audit frequency shall be at least once per 12 months.

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

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

f. 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.

6.5.3 AUDITS (con't)

g. The ODCM and implementing procedures at least once per 24 months.

h. Any other area of unit operation considered appropriate by the PDMS Manager or the Office of the President - GPUNC.

RECORDS

6.5.3.2 Audit reports encompassed by Section 6.5.3.1 shall be forwarded for action to the management positions responsible for the areas audited and the IOSRG within 60 days after completion of the audit. Upper management shall be informed in accordance with the TMI-2 PDMS QA 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 a. The IOSRG staff shall be as specified in the TMI-1 Tech. Specs. (License No. DPR-50).

b. The IOSRG shall report to the director responsible for nuclear safety assessment and will perform their function for both TMI Unit 1 and Unit 2.

RESPONSIBILITY

6.5.4.3 The periodic review functions of the IOSRG shall include the following on a selective and overview basis:

a. The independent review activities stated in Section 6.5.2.5 which may be performed after the fact.

b. Assessment of unit operations and performance and unit safety programs from a nuclear safety perspective.

c. Any other matter involving safe operations of the nuclear power plant that the onsite IOSRG manager or the PDMS Manager deems appropriate for consideration.

AUTHORITY

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

QUALIFICATIONS

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

RECORDS

6.5.4.6 Reports of evaluations and assessments encompassed in Section 6.5.4.3 shall be prepared, approved, and transmitted to the Manager, TMI-2 Department, the division vice president responsible for nuclear safety assessment and the management positions responsible for the areas reviewed.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Nuclear Regulatory Commission shall be notified and/or a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50, and

b. Each REPORTABLE EVENT shall undergo an independent safety review pursuant to Specification 6.5.2.5 d.

6.7 PROCEDURES AND PROGRAMS

6.7.1 Written procedures shall be established, implemented, and maintained for the activities necessary to maintain the PDMS condition as described in the PDMS SAR. Examples of these activities are:

a. Technical Specification implementation.

b. Radioactive waste management and shipment.

c. Radiation Protection Plan implementation.

d. Fire Protection Program implementation.

e. Flood Protection Program implementation.

6.7 PROCEDURES AND PROGRAMS (con't)

6.7.2 Each procedure required by Section 6.7.1, and SUBSTANTIVE CHANGES thereto, shall be reviewed and approved as described in Section 6.5.1 prior to implementation and shall be reviewed periodically as required by ANSI N18.7-1976.

6.7.3 Temporary changes to procedures in Section 6.7.1 above may be made provided:

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

b. The change is approved by two members of the responsible organization qualified in accordance with Section 6.5.1.9 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; and

c. The change is documented, reviewed and approved as described in Section 6.5.1 within 14 days of implementation.

6.7.4 The following programs shall be established, implemented, and maintained:

a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1. Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,

2. Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table 2, Column 2,

3. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1301 and with the methodology and parameters in the ODCM,

6.7 PROCEDURES AND PROGRAMS (con't)

4. Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,

5. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

6. Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

7. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1,

8. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,

9. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from tritium and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50.

b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

6.7 PROCEDURES AND PROGRAMS (con't)

1. Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,

2. A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of the census, and

3. Participation in an Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

6.8 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.8.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be in accordance with 10 CFR 50.4 unless otherwise noted. Some of the reporting requirements of Title 10, Code of Federal Regulations are repeated below.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

6.8.1.1 The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

6.8.1.2 The Annual Radiological Effluent Release Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

6.8 REPORTING REQUIREMENTS (con't)

ANNUAL REPORTS[1]

6.8.1.3 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.

Reports required on an annual basis shall include:

a. A tabulation of the number of station, utility and other personnel (including contractors) for whom monitoring was required, receiving exposures greater than 100 mrem/yr and their associated person-rem exposure according to work and job functions[2], e.g., surveillance, routine maintenance, special maintenance (the dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements). Small exposures totaling 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.

BIENNIAL REPORTS

6.8.1.4 Biennial reports (i.e., once every two years) covering the activities of the unit as described below during the previous two calendar years shall be submitted prior to March 1 of every other year.

Reports required on a biennial basis shall include:

a. All changes made to the PDMS SAR during the previous two calendar years.

b. All changes, tests, or experiments meeting the requirements of 10 CFR 50.59.

SPECIAL REPORTS

6.8.2 Special reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

6.8.3 NONROUTINE REPORTS

A report shall be submitted in the event that an Exceptional Occurrence as specified in Section 6.13 occurs. The report shall be submitted under one of the report schedules described below.

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[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 Article 20.2206 of 10 CFR 20.

6.8 REPORTING REQUIREMENTS (con't)

PROMPT REPORTS

6.8.3.1 Those events specified as prompt report occurrences shall be reported within 24 hours by telephone, telegraph, or facsimile transmission to the NRC followed by a written report to the NRC within 30 days.

THIRTY DAY EVENT REPORTS

6.8.3.2 Nonroutine events not requiring a prompt report as described in Subsection 6.8.3.1, shall be reported to the NRC either within 30 days of their occurrence or within the time limit specified by the reporting requirement of the corresponding certification or permit issued pursuant to Sections 401 or 402 of PL 92-500, the Federal Water Pollution Control Act (FWPCA) Amendment of 1972, whichever time duration following the nonroutine event shall result in the earlier submittal.

CONTENT OF NONROUTINE REPORTS

6.8.3.3 Written 30-day reports and, to the extent possible, the preliminary telephone, telegraph, or facsimile reports shall (a) describe, analyze, and evaluate the occurrence, including extent and magnitude of the impact, (b) describe the cause of the occurrence, and (c) indicate the corrective action (including any significant changes made in procedures) taken to preclude repetition of the occurrence and to prevent similar occurrences involving similar components or systems.

6.9 RECORD RETENTION

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

a. Records of sealed source and fission detection leak tests and results.

b. Records of annual physical inventory of all sealed source material of record.

6.9.2 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 EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

6.9 RECORD RETENTION (Con't)

e. Records of changes made to the procedures required by Recovery Technical Specification 6.8.1 and PDMS Technical Specification 6.7.1.

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.

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 previously required by the Technical Specifications.

o. Records of Quality Assurance activities required by the Operating, Recovery, or PDMS Quality Assurance Plans.

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 Generation Review Committee (GRC), and reports of evaluations prepared by the IOSRG, if applicable to TMI-2.

r. Records of the incident which occurred on March 28, 1979.

s. Records of unit radiation and contamination surveys.

t. Records of radiation exposure received by all individuals for whom monitoring was required.

6.9 RECORD RETENTION (Con't)

u. Records of gaseous and liquid radioactive material released to the environs.

v. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL.

6.10 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.

6.11 HIGH RADIATION AREA

In lieu of the "control device" or "alarm signal" required by paragraph 20.1601 of 10 CFR 20, each high radiation area shall be controlled as specified in the Radiation Protection Plan.

6.12 OFFSITE DOSE CALCULATION MANUAL (ODCM)

SUBSTANTIVE CHANGES to the ODCM:

a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.9.2 v. This documentation shall contain:

1. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and

2. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1301, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.

b. Shall become effective after review and acceptance by GPU Nuclear management.

c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

## 6.13 EXCEPTIONAL OCCURRENCES

### UNUSUAL OR IMPORTANT ENVIRONMENTAL EVENTS

6.13.1 Any occurrence of an unusual or important event that causes or could potentially cause significant environmental impact causally related with station operation shall be recorded and reported to the NRC per Subsection 6.8.3.1. The following are examples of such events: excessive bird impaction events on cooling tower structures or meteorological towers (i.e., more than 100 in any one day); onsite plant or animal disease outbreaks; unusual mortality of any species protected by the Endangered Species Act of 1973; fish kills near or downstream of the site.

### EXCEEDING LIMITS OF RELEVANT PERMITS

6.13.2 Any occurrence of exceeding the limits specified in relevant permits and certificates issued by other Federal and State agencies which are reportable to the agency which issued the permit shall be reported to the NRC in accordance with the provisions of Subsection 6.8.3.2. This requirement shall apply only to topics of National Environmental Protection Act (NEPA) concern within the requirements of the permits and certificates noted in Section 6.14.

## 6.14 STATE AND FEDERAL PERMITS AND CERTIFICATES

Section 401 of PL 92-500 requires any applicant for a Federal license or permit to conduct any activity which may result in any discharge into navigable waters to provide the licensing agency a certification from the State having jurisdiction that the discharge will comply with applicable provisions of Sections 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the 401 certification dated November 9, 1977 or its currently applicable revision, issued to the licensee by the Pennsylvania Department of Environmental Resources, which requires, among other things, that the licensee comply with effluent limitations stipulated in the NPDES PERMIT.

6.14 STATE AND FEDERAL PERMITS AND CERTIFICATES (con't)

Changes or addition to the required Federal and State permits and certificates for the protection of the environment noted in this subsection shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any of the water quality requirements, limits or values stipulated in any certification or permit issued pursuant to Sections 401 and 402 of PL 92-500, NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit or value being sought.

If, during NRC's review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken.

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO POST-DEFUELING MONITORED STORAGE

# FACILITY OPERATING LICENSE NO. DPR-73

# GPU NUCLEAR CORPORATION

# THREE MILE ISLAND NUCLEAR STATION, UNIT 2

# DOCKET NO. 50-320

## 1.0 INTRODUCTION

By letter of August 16, 1988, as supplemented[1], the General Public Utilities Nuclear Corporation (the licensee) requested an amendment to Facility Operating License No. DPR-73 for the Three Mile Island Nuclear Station Unit 2 (TMI-2). The August 16, 1988 letter included the proposed amended facility license for Post-Defueling Monitored Storage (PDMS), proposed Technical Specifications, and the PDMS Safety Analysis Report (SAR). The proposed amendment would permit the licensee to place the TMI-2 facility in a monitored storage condition. This document updates the February 20, 1992 Safety Evaluation (SE), issued by the NRC staff, by including in this updated SE, revisions to the licensee application and changes made to the technical specifications by intervening license amendments issued through December 1993. It also corrects minor typographical or administrative errors in the initial SE. Changes to the initial SE are indicated by vertical lines in the right margin.

In response to the licensee amendment request, the staff issued, in August 1989, Final Supplement 3 to the "Programmatic Environmental Impact Statement Dealing with Post-Defueling Monitored Storage and Subsequent Cleanup" (PEIS). On April 12, 1990, the licensee informed the staff that it had completed defueling efforts at the TMI-2 facility. On April 25, 1991, the staff published a notice of opportunity for a prior public hearing regarding the license amendment request for a POL and the proposed changes to the technical specifications allowing for long term storage of the facility (56 FR 19128). On February 20, 1992, the staff issued a safety evaluation (SE) and technical evaluation report (TER) that evaluated the licensee amendment request, for both the POL and the PDMS Technical Specifications.

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[1]Letters of September 19, 1988, February 9, 1989, March 31, 1989, June 26, 1989, October 10, 1989, November 22, 1989, June 21, 1990, October 15, 1990, November 7, 1990, February 19, 1991, April 19, 1991, June 21, 1991, August 28, 1991, October 9, 1991, January 13, 1992, January 18, 1993, May 28, 1993, October 24, 1993, November 12, 1993.

In response to the staff notice of opportunity for a prior public hearing, Mr. Eric Epstein petitioned to intervene. Upon the encouragement of the Atomic Safety and Licensing Board (ASLB) assigned to this docket, a settlement agreement was filed with the ASLB. on September 25, 1992, between the petitioner, the licensee, and the NRC staff. Based on the settlement agreement, the ASLB dismissed the proceedings on October 16, 1992.

On January 15, 1993, the licensee forwarded for staff review a proposed list of remaining PDMS requirements and commitments that had to be completed prior to issuance of the POL and the PDMS technical specifications. This list was generated from (1) the safety analysis report submitted by the licensee in support of its license amendment request, (2) the February 20, 1992, safety evaluation issued by the staff, and (3) from several meetings at TMI-2 that were attended by members of the public. The staff has reviewed this list and in a letter dated May 19, 1993, found it acceptable. The licensee has requested changes to the list on May 28, 1993 and October 24, 1993. The staff evaluated the proposed changes and issued a revised list and an applicable Safety Evaluation in each case, the most recent revised list (Revision 2) on November 16, 1993.

On July 6, 1993, the NRC staff issued a letter to the licensee that concluded that the fuel in the TMI-2 reactor vessel will remain subcritical, with an adequate margin of safety, during both the steady state and postulated accident conditions. Based on this conclusion the staff issued Amendment 45 on September 14, 1993, which modified Facility Operating License No. DPR-73, for TMI-2 to a POL. The POL allows the licensee to possess but not operate the TMI-2 facility.

Although the POL Amendment was issued on September 14, 1993, the current technical specifications are not compatible with PDMS. The PDMS Technical Specifications could not be implemented until the final phases of the current cleanup effort were completed, the NRC staff had verified the implementation of the PDMS requirements and commitments, and the licensee had satisfied a number of PDMS license conditions. Therefore, the purpose of this action is to issue the PDMS Technical Specifications now that the licensee is ready to enter PDMS, the PDMS requirements and commitments have been satisfied, and all license conditions are met.

## 2.0 DISCUSSION AND EVALUATION

The potential for the routine release of any significant quantity of radioactive material from TMI-2 during PDMS has been minimized by the removal of as much of the fuel and core debris as reasonably achievable and the decontamination of large sections of the reactor and auxiliary and fuel handling building AFHB surfaces, equipment and piping. Routine releases were calculated to be significantly below the quantity specified in 10 CFR Part 50, Appendix I for annual release to the environment.

Chapter 8 of the licensee PDMS SAR evaluated seven potential accident scenarios that could occur during PDMS. The selection of accidents was based on a generic study of a PWR decommissioning following an accident. The accidents evaluated were: 1) vacuum canister failure; 2) accidental spraying of concentrated contamination with high pressure spray; 3) accidental cutting

of contaminated pipe; 4) accidental break of contaminated pipe; 5) fire inside containment; 6) open penetration; and 7) the rupture and release of resins from the Makeup and Purification Demineralizers. Additionally, in PEIS Supplement 3, the staff identified three potential accidents resulting in an atmospheric release. These were 1) a fire in the stairwell/elevator structure, 2) the rupture of a HEPA filter during decontamination activities, and 3) the spill of decontamination solution in the reactor building.

The staff reviewed the types of activities that would be permitted during PDMS and the licensee accident analyses and performed independent evaluations of eight potential accidents. These were: 1) vacuum canister failure, 2) high pressure spray of contamination, 3) cutting contaminated pipe, 4) break of contaminated pipe, 5) elevator/stairwell fire in containment, 6) D-rings fire in containment, 7) containment penetration failure and 8) the rupture and release of resins from Makeup and Purification Demineralizers. Although few activities are expected to be conducted during PDMS, routine surveillance, preventive maintenance and stabilization activities will occur, if migration of radioactive material is detected. For the most severe accident, the fire in the D-rings in containment with no operation of the ventilation system, the total body and bone dose to the maximally exposed individual at the site boundary is 49 and 51 mrem, respectively (PDMS TER Section 5.4). This is approximately 0.2 percent of the 10 CFR Part 100 limits. The staff reviews found that accident consequences for the defueled, non-operating condition at TMI-2 are significantly reduced compared to past decontamination and defueling operations. The staff determined that, with the post-accident, inoperable and essentially defueled condition of TMI-2, the probability and consequences of previously analyzed accidents has been lessened due to the removal of the fuel, partial decontamination of the facility, and reduced level of activity that will be conducted during PDMS.

The staff reviewed the licensee Defueling Completion Report (DCR) and the PDMS SAR. The following conclusions of this Safety Evaluation are based on the information in the licensee reports and on the conclusions in the staff PEIS Supplement No. 3 and the PDMS TER: 1) defueling of the reactor has been accomplished to the extent reasonably achievable, 2) all fuel and core debris which have been removed from the reactor and associated systems have been shipped offsite, 3) the results of analyses indicate that there is no potential for criticality in the fuel remaining in the TMI-2 facility during either normal or accident conditions, 4) remaining radioactive waste from the major TMI-2 decontamination activities has been shipped offsite or packaged and staged for shipment offsite, 5) radiation levels within the facility have been reduced such that plant monitoring, maintenance and inspections can be performed, 6) radiological surveillance of activities during PDMS will be conducted in accordance with the approved Offsite Dose Calculation Manual and in compliance with the regulatory requirements of 10 CFR Part 20 which will, with the approved Radiation Protection Plan, ensure adequate control of occupational exposure and protection of workers, 7) the surveillance program proposed by the licensee will adequately monitor the PDMS environmental protection systems, 8) the environmental monitoring activities for TMI-2 during PDMS, included in the TMI Site Radiological Environmental Monitoring Plan, will ensure adequate environmental surveillance and control, 9) fire prevention, detection, and control as specified by the approved Fire Protection Program Evaluation will assure adequate reduction of fire potential

as well as detection and control during PDMS, and 10) the requirements delineated in the proposed Technical Specifications for PDMS provide assurance that the facility will be maintained in a safe condition that will not negatively impact the environment.

As stated above, the staff issued a Safety Evaluation (SE) on February 20, 1992, which evaluated each specific change to the Appendix A and B Technical Specifications requested by the licensee for PDMS. The SE provided an evaluation of the PDMS Technical Specifications, as proposed in the PDMS SAR through Amendment 15 (dated January 13, 1992), and compared them to the Appendix A and B Technical Specifications for TMI-2 as of February 20 1993 (through License Amendment 40, issued March 6, 1991). Since February 20, 1992, both the Appendix A and B Technical Specifications and the proposed PDMS Technical Specifications have been amended. The Appendix A and B Technical Specifications have been amended seven times. Amendment 41, issued on March 2, 1992, deleted the requirement for a TMI-2 Deputy Director. Amendment 42, issued on June 5, 1992 deleted the requirement to sample for Sr-89. Amendment 43, issued on May 26, 1993, relocated the requirements related to radiological effluents to the Offsite Dose Calculation Manual (ODCM). Amendment 44, issued on July 12, 1993, removed the requirement for the NRC staff to preapprove procedures for disposal of the Accident Generated Water (AGW). Amendment 45, issued on September 14, 1993, granted a POL to the licensee but did not change any of the Appendix A or B Technical Specifications. Amendment 46, issued on November 8, 1993, corrected an omission to Amendment 43. Amendment 47, issued on December 6, 1993, removed reference to the AGW from the technical specifications. The PDMS SAR, which contains the PDMS Technical Specifications in Section 9, has been amended four times (PDMS SAR Amendment 16 dated January 18, 1993, Amendment 17 dated May 28, 1993, Amendment 18 dated October 24, 1993, and Amendment 19 dated November 12, 1993) since issuance of the February 20, 1992 SE.

The licensee informed the NRC staff by letter (GPUN C312-93-2072) dated November 12, 1993, that all the requirements and commitments for entry into PDMS have been satisfied. In a separate letter (GPUN C312-93-2073), also dated November 12, 1993, the licensee informed the NRC that they would be ready to transition to PDMS within the next 30 days. The staff has independently verified that the licensee has satisfied all the requirements and commitments identified in the enclosure to the November 16, 1993 letter to the licensee from the staff. The staff has documented the verification that the PDMS requirements and commitments have been satisfied by the licensee in NRC Inspection Report No. 50-320/93-07, dated December 23, 1993, and in NRC staff memoranda to R. Dudley dated December 17, 1993, December 23, 1993, December 27, 1993, and December 28, 1993.

On September 14, 1993, the staff issued license amendment 45 granting the licensee a POL. Paragraph 2 of the POL contained three license conditions that must be satisfied prior to entry into PDMS. The first License Condition 2.D, Special Auxiliary and Fuel Handling Building Ventilation Study, required the submission of one year of data from a special auxiliary and fuel handling building (AFHB) ventilation study. The licensee complied with this requirement and submitted the data on December 22, 1993. The staff has reviewed the submittal by the licensee and found it acceptable.

The second License Condition, 2.E, Unfiltered Leak Rate Test, required the submittal of a surveillance requirement for the reactor building. On January 18, 1993, in Amendment 16 to the PDMS SAR, the licensee submitted the proposed surveillance requirement. Item B1 below discusses the proposed surveillance requirement. The staff has reviewed the licensee submittal and has found it acceptable.

The third License Condition, 2.F, Additional Submittals Prior to PDMS, requires the licensee to submit and implement a number of plans, or evaluations prior to entry into PDMS. It also requires the licensee to submit to the NRC the results of the completed plant radiation and contamination surveys prior to entry into PDMS. The licensee submitted the results of the surveys by letter dated November 12, 1993. The staff has determined that the submittal fulfills the requirement in license condition 2.F to submit the results of their radiological surveys.

License Condition 2.F also required the submittal and implementation of the following: a PDMS Quality Assurance Plan, an Offsite Dose Calculation Manual (ODCM), a PDMS Fire Protection Program Evaluation, a Site Flood Protection Plan, a Site Radiation Protection Plan, and a Radiological Environmental Monitoring Plan. The licensee submitted the PDMS Quality Assurance Plan by letter dated August 23, 1988. The staff approved the licensee plan by letter dated June 3, 1993. The ODCM was submitted by the licensee as part of the application of License Amendment 43, dated May 26, 1993. The staff determined that the ODCM was acceptable and issued License Amendment 43 on May 26, 1993. The PDMS Fire Protection Plan Evaluation was submitted on October 14, 1993. The staff in a memorandum dated December 7, 1993 found the plan acceptable. The Site Flood Protection Plan is contained in TMI-1 Emergency Procedure 1202-32, dated August 21, 1992, and was submitted to the NRC by letter dated January 4, 1993. The staff has compared the procedure to the current TMI-2 technical specifications and has found the procedure acceptable in a memorandum dated December 21, 1993. The Site Radiation Protection Plan was submitted to the NRC by letter dated January 4, 1993. The staff has reviewed the plan and has, in inspection report 50-320/93-07, dated December 23, 1993 found it to be acceptable.

The Radiological Environmental Monitoring Program Plan is contained in TMI-2 Procedure 6615-PLN-4520.01, effective October 30, 1992, and submitted to the NRC by letter dated January 4, 1993. The staff, in a memorandum dated December 17, 1993, found the plan acceptable.

Therefore, the staff has concluded that the licensee has satisfied the license conditions for entry into PDMS specified by Sections 2.D, 2.E, and 2.F of POL No. DPR-73.

## 4.0 PROPOSED CHANGES TO LICENSE DPR-73

The staff has evaluated the proposed PDMS Technical Specifications, contained in the PDMS SAR through PDMS SAR Amendment 19, dated November 12, 1993, and compared them to the current TMI-2 Appendix A and B Technical Specifications through Amendment 47, dated December 6, 1993. The portion of the SE pertaining to the licensee POL request (items 1 through 27) has been deleted since those changes were issued in TMI-2 License Amendment 45 dated

September 14, 1993. The item number of each change has been renumbered to reflect the removal of those changes granted by License Amendment 45, issued on September 14, 1993. The staff has determined that the changes to the PDMS Technical Specifications, proposed by the licensee in Amendments 16 through 19 of the PDMS SAR, are consistent with the April 25, 1991 Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for Hearing for the requested amendment (56 FR 19128).

1. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.2, Recovery Operations Plan, delete the entire paragraph and replace with "1.2 Post-Defueling Monitored Storage (PDMS) is that condition where TMI-2 defueling has been completed, the core debris removed from the reactor during the cleanup period has been shipped offsite and the facility has been placed in a stable, safe, and secure condition."

   Evaluation: This proposed Technical Specification change deletes the definition of the Recovery Operations Plan and instead provides the definition of the status of the facility when the facility is ready for entry into PDMS. The staff finds this change acceptable, since the Recovery Operations Plan is no longer necessary because the surveillance requirements contained in the Recovery Operations Plan will be incorporated in the proposed PDMS Technical Specifications.

2. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.3 MODE, delete the entire paragraph.

   Evaluation: This change removes the definition of MODE (see Chapter 2 of the PDMS TER for an explanation of MODEs). Because of the post-accident, inoperable and essentially defueled condition of the facility, the use of MODEs will be discontinued at the start of PDMS. The staff finds this change acceptable.

   The word "FACILITY" has been deleted to be consistent with the proper terminology used in the current technical specifications and to correct an administrative error in the terminology used the initial SE. The staff finds this change also acceptable.

3. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.4, Change the identification of this paragraph to 1.3.

   Evaluation: This is a format change only and improves the clarity and readability of the document. The staff finds this change acceptable.

4. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.5, Delete." Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, "and replace with "and when all necessary attendant instrumentation, controls, electrical power." Change the identification of this paragraph to 1.4.

   Evaluation: This change alters the definition of operability by deleting reference to the requirement for emergency electric

power sources during PDMS. During PDMS, electrical power will not be required to safely shut down the plant or mitigate the consequences of an accident. The plant is already shut down and the analysis of potential accidents does not rely on the use of emergency electric power sources to stay within the regulatory limits for radioactive releases (see PDMS TER Section 6.6.1). Because of the post-accident, inoperable and essentially defueled condition of the facility, there are no active safety systems requiring emergency power during PDMS. The staff finds this change acceptable.

5. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.6, Change title from "REPORTABLE EVENT" to "REPORTABLE EVENTS;" the paragraph on Reportable Events is renumbered 1.13.

   Evaluation: This is a format change only and improves the clarity and readability. The staff finds this change acceptable.

6. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.7, delete the entire paragraph related to Containment Integrity.

   Evaluation: Containment Integrity was applicable only to Mode 1. The licensee is currently in Mode 3 (see Chapter 2 of the PDMS TER for an explanation of facility modes). Therefore, this definition refers to a requirement that no longer exists, is not applicable to PDMS and can be deleted. The staff finds this change acceptable.

7. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.8, renumber the existing paragraph as 1.5 and replace it with " An instrument CHANNEL CALIBRATION is a test, and adjustment, as necessary, to establish that the channel output responds with acceptable range and accuracy to known values of the parameter which the channel measures or an accurate simulation of these values. CHANNEL CALIBRATION shall encompass the entire channel including equipment activation, alarm or trip, and shall be deemed to include the CHANNEL FUNCTIONAL TEST."

   Evaluation: The licensee is updating the definition of CHANNEL CALIBRATION to be consistent with the standard Technical Specification definition. The staff finds this change adds to the clarity of the Technical Specifications and is acceptable.

8. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.9, renumber this paragraph 1.6.

   Evaluation: This is a format change only and improves the clarity and readability of the document. The staff finds this change acceptable.

9. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.10, delete existing paragraph and replace with "1.7 A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions."

Evaluation: The licensee is updating the definition of CHANNEL FUNCTIONAL TEST to be consistent with the standard Technical Specifications definition. The staff finds this change acceptable.

10. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.11, renumber this paragraph as 1.14.

Evaluation: This is a format change only and improves the clarity and readability of the document. The staff finds this change acceptable.

11. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.12, change the number of the paragraph from 1.12 to 1.8 and the Table number from 1.2 to 1.1.

Evaluation: This is a format change only and improves the clarity and readability of the document. The staff finds this change acceptable.

12. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.13, delete this entire paragraph.

Evaluation: This change removes the definition of FIRE SUPPRESSION WATER SYSTEM because the Technical Specifications requirements for a fire suppression water system have been deleted. The fire protection program for TMI-2 during PDMS, described in the PDMS SAR (7.2.2), is specified in the Fire Protection Program Evaluation manual which is referenced in the PDMS TER (6.4.3). A Fire Protection Program Evaluation is required by POL license condition 2.F. This change implements NRC Generic Letter 88-12, dated August 1, 1988 entitled "Removal of Fire Protection Requirements from Technical Specifications." The staff finds this change acceptable.

13. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.14, delete this entire paragraph.

Evaluation: This change will remove the definition of REVIEW SIGNIFICANT which specified specific topics that formerly required review during the cleanup. The term "REVIEW SIGNIFICANT" is no longer used in the revised PDMS Technical Specifications, therefore, defining the term is no longer necessary. The staff finds this change acceptable.

14. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.15, delete entire paragraph.

Evaluation: This change removes the definition of CORE ALTERATION, which is the movement or manipulation of any reactor component (including core debris or fuel ([i.e., $UO_2$]) within the reactor pressure vessel with the head removed and fuel in the vessel. Due to the post-accident, inoperable and essentially defueled condition of the reactor, no CORE ALTERATION activities as would take place in an operating reactor can be conducted. There is a Technical Specification on Fuel

Removal/Rearrangement (proposed Technical Specification 3.2.1.1) which is very explicit and needs no definition of terms. The staff finds this change acceptable.

15. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.16, delete entire paragraph.

    Evaluation: Since the reactor has had approximately 99 percent of the fuel removed, decay heat generation is insignificant, therefore, technical specifications on decay heat removal are unnecessary. The staff finds this change acceptable.

16. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.17, delete the entire paragraph.

    Evaluation: The SE is updated. The definition of "ACCIDENT GENERATED WATER" was removed from the current technical specifications by License Amendment 47, dated December 6, 1993. This is an administrative change that the staff finds acceptable.

17. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.18, 1.19, and 1.20, delete these three paragraphs in their entirety.

    Evaluation: The definitions of LICENSED OPERATOR, SENIOR LICENSED OPERATOR, and FUEL HANDLING SENIOR REACTOR OPERATOR are removed. Section 6.2.2 of the current Technical Specifications no longer requires Licensed Operator, Senior Licensed Operator, or Fuel Handling Senior Reactor Operator. These positions were required during defueling. The TMI-2 facility is currently in a post-accident, inoperable and essentially defueled condition. Since there is no fuel in the reactor and no reactor fuel on site to be handled, there is no need for requirements for NRC licensed operators or fuel handling personnel. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

18. Change: License DPR-73, Technical Specifications, Section 1, Definitions, 1.21, delete the entire paragraph and replace with:

    "1.9 CONTAINMENT ISOLATION shall exist when:

    a. Each penetration is:

       1. Closed by a manual valve, a welded or bolted blind flange, a deactivated automatic valve secured in the closed position or other equivalent mechanical closure to provide isolation of each penetration, or

       2. Open and the pathway to the environment provided with a HEPA filter, or

       3. Open in accordance with approved procedures. Controls shall be implemented to minimize the time the penetration is allowed open

and to specify the conditions for which the penetration is open. Penetrations shall be expeditiously closed upon completion of the conditions specified in the approved procedures, and

b. The Equipment Hatch is closed , and

c. Each Containment Airlock is operable pursuant to Technical Specification 3.1.1.3."

Evaluation: Changes modify the wording and add the provision for HEPA filtration of open penetrations. The wording changes do not reduce the quality of the CONTAINMENT ISOLATION or alter the intent of the Technical Specification. The provision for HEPA filtration of open penetrations permits installation of an atmospheric breather line without permitting an unfiltered release point. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

The SE has been revised to delete "and sealed". The words "and sealed" were inadvertently added to the February 20, 1992 version of the SE and do not appear in the current Appendix A Technical Specifications. The staff finds this change also acceptable.

19. Change: License DPR-73, Technical Specifications, Section 1, Definitions, Table 1.1, delete this Table in its entirety.

Evaluation: Table 1.1 defines the conditions for Modes 1, 2 and 3 (see Chapter 2 of the PDMS TER for an explanation of facility modes). Since the reactor has been defueled to the extent reasonably achievable, fuel canisters containing core debris has been removed from the reactor building and from the site, and the facility is being placed in a defueled, non-operating monitored storage, the mode definitions will no longer be applicable to the facility. The staff finds this change acceptable.

20. Change: License DPR-73, Technical Specifications, Section 1, Definitions, Table 1.2, renumber the Table 1.1 and add "P Completed prior to each release." Change abbreviation "N.A." for Not Applicable to "N/A."

Evaluation: The FREQUENCY NOTATION defined in the Table will be needed for surveillance, calibration and sampling activities. The addition of the FREQUENCY NOTATION "P" provides definition for sampling of batches prior to release. Renumbering of the table improves clarity and readability. The staff finds this change acceptable.

The SE has been revised to correct a minor typographical error. The term "N/A" is substituted for the term "N.A." which was incorrectly used in the February 20, 1992 SE. The staff also finds this change acceptable.

21. Change: License DPR-73, Technical Specifications, Section 1, Definitions, add "1.10 A BATCH RELEASE is the discharge of a discrete volume."

    Evaluation: The definition of a BATCH RELEASE is needed because the facility may be required to process, sample, and release discrete volumes of liquid effluent during PDMS. The staff finds this change acceptable.

22. Change: License DPR-73, Technical Specifications, Section 1, Definitions, add "1.11 A CONTINUOUS RELEASE is the discharge of a non-discrete volume, e.g., from a volume or system that has an input flow during the continuous release."

    Evaluation: The definition of a CONTINUOUS RELEASE is needed because the facility may be required to process, monitor, and release continuous volumes of effluent during PDMS. The staff finds this change acceptable.

23. Change: License DPR-73, Technical Specifications, Section 1, Definitions, Renumber 1.22 OFFSITE DOSE CALCULATION MANUAL to 1.12, and change the words "Environmental Radiological Monitoring Program" to "Radiological Environmental Monitoring Program". Following the words "The ODCM shall also contain" revise "(1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4" to "(1) the programs required by Section 6.7.4" and delete the remainderof the paragraph and replace with "and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.8.1.2 and 6.8.1.3."

    Evaluation: The SE has been updated to reflect the changes in the current Technical Specifications as a result of the issuance of License Amendment 43, dated May 26, 1993, which removed the details of the radiological monitoring requirements from the Technical Specifications and placed them in the ODCM. This is a format change only, primarily renumbering the Specifications as appropriate and improves the clarity and readability of the document. The staff finds this change acceptable.

24. Change: License DPR-73, Technical Specifications, Section 1, Definitions, add "1.15 SUBSTANTIVE CHANGES are those which affect the activities associated with a document or the document's meaning or intent. Examples of non-substantive changes are: (1) correcting spelling; (2) adding (but not deleting) sign-off spaces; (3) blocking in notes, cautions, etc.; (4) changes in corporate and personnel titles which do not reassign responsibilities and which are not referenced in the PDMS Technical Specifications; and (5) changes in nomenclature or editorial changes which clearly do not change function, meaning or intent.

    Evaluation: This change defines what is meant by a SUBSTANTIVE CHANGE to assure that appropriate reviews, authorizations, and approvals are

provided for changes that substantially alter the meaning or intent of a document. The staff finds this change acceptable.

25. Change: License DPR-73, Technical Specifications, Section 1, Definitions, change the number from 1.23 to 1.16.

    Evaluation: The SE has been updated to reflect the prior incorporation of the definition of "MEMBER(S) OF THE PUBLIC" in the current technical specifications by Amendment 43, dated May 26, 1993. The SE has been revised to renumber the definition paragraph. This is a format change only and improves the clarity and readability of the document. The staff finds this change acceptable.

26. Change: License DPR-73, Technical Specifications, Section 1, Definitions, change the number from 1.24 to 1.17 and change the first part to read "An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by GPU Nuclear for purposes of protection...".

    Evaluation: The SE has been updated to reflect the prior incorporation of the definition of "UNRESTRICTED AREA" in the current technical specifications as a result of Amendment 43, dated May 26, 1993. The term "licensee" is changed to "GPU Nuclear" and the definition paragraph is renumbered. These revision improve the clarity and readability of the document. The staff finds these changes acceptable.

27. Change: License DPR-73, Technical Specifications, Section 1, Definitions, change the number from 1.25 to 1.18 and add a second sentence. "The SITE BOUNDARY for gaseous and liquid effluents shall be as shown in ODCM."

    Evaluation: The SE has been updated to reflect the prior incorporation of the definition of "SITE BOUNDARY" in the current technical specifications as a result of License Amendment 43, dated May 26, 1993. The definition paragraph is also renumbered.ODCM. This is a format change that improves the readability of the document. The staff finds this change acceptable.

28. Change: License DPR-73, Technical Specifications, Section 1, Definitions, add "1.19 The NPDES PERMIT is the National Pollutant Discharge Elimination System (NPDES) Permit No. PA0009920, effective January 30, 1975, issued by the Environmental Protection Agency to Metropolitan Edison Company. This permit authorized Metropolitan Edison Company to discharge controlled waste water from TMI Nuclear Station into the waters of the Commonwealth of Pennsylvania."

    Evaluation: This change adds the definition for NPDES Permit which is required as a result of combining Appendix A and Appendix B Technical Specifications into a single set of proposed PDMS Technical Specifications. The staff finds this change acceptable.

29. Change: License DPR 73, Technical Specifications, Section 2, title page, delete "and Limiting Safety System Settings."

Evaluation: This change revises the title page to indicate the contents of the Section. Since there are no Safety Systems required for the post accident, inoperable and essentially defueled condition of the facility during PDMS, no limiting safety system settings are necessary. The staff finds this change acceptable.

30. Change: License DPR-73, Technical Specifications, Section 2.0, SAFETY LIMITS, add after "...TMI-2" "during PDMS."

Evaluation: This change provides more specificity to the statement and improves clarity and consistency clarity. The staff finds this change acceptable.

31. Change: License DPR-73, Technical Specifications, Section 3, Title Page. Delete the page in its entirety and replace with: "Section 3/4, Limiting Conditions for PDMS and Surveillance Requirements."

Evaluation: This change revises the numbering and title of the section to correctly identify its contents. This change was an administrative change to improve readability of the document and made as a result of combining the Technical Specifications into a document incorporating the requirements for a post-accident, inoperable and essentially defueled reactor facility. The staff finds this change acceptable.

32. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, Paragraph 3.0.1, delete "Operation" and "the FACILITY MODE" and replace with "PDMS" and "POST-DEFUELING MONITORED STORAGE," respectively.

Evaluation: This specification defines the applicability of each specification in terms of the condition of the facility, i.e., PDMS. Because of the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

33. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, Paragraph 3.0.2, delete "Operation" in line one and line four of the specification and replace with "PDMS" in each place.

Evaluation: This specification defines those conditions necessary to constitute compliance with the specifications in terms of the condition of the facility. Because of the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

34. Change: License DPR-73, Technical Specifications, Part 3, Limiting Conditions for Operation, Paragraph 3.0.3, delete "operation" in the first sentence and "Section 50.73 of 10 CFR 50" in the last sentence of the specification and replace them with "PDMS" and "10 CFR 50.73" respectively.

Evaluation: This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements.

Because of the post-accident, inoperable and essentially defueled condition of the facility, the change from "operation" to "PDMS" is appropriate. The editorial change in the method of referencing the Code of Federal Regulations is also acceptable.

35. Change: License DPR-73, Technical Specifications, Part 3, Limiting Conditions for Operation, 3.1, 3.1.1, 3.1.1.1, 3.1.1.2, 3.1.1.3, 3.1.1.4, delete these paragraphs in their entirety.

Evaluation: These proposed Technical Specifications are related to borated water injection and boron concentration in water systems for reactivity control. Since the reactor has been defueled and criticality is not possible, reactivity control is not necessary (See PDMS TER, Section 5.1.4). Due to the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

36. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.3, 3.3.1, 3.3.1.1 delete these paragraphs.

Evaluation: This change removes the requirement for neutron monitoring instrumentation. Based on the results of the licensee's Defueling Completion Report and the subsequent NRC staff review and approval; the possibility of an inadvertent criticality is precluded at TMI-2 (see PDMS TER, Section 5.1.4). Therefore, neutron monitoring instrumentation is not required. The staff finds this change acceptable.

37. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.3.3, 3.3.3.4, 3.3.3.5, and 3.3.3.7, delete these paragraphs.

Evaluation: This change removes requirements related to meteorological, essential parameters, and chlorine detection instrumentation. These instrumentation systems are required for operating reactors to ensure detection of potentially hazardous conditions. For the post accident, inoperable and essentially defueled condition of TMI-2, these instrument systems are not needed. The staff finds these changes acceptable.

The SE has been corrected to include the deletion of the section number and heading for Section 3.3.3. The February 20, 1992 SE failed to include the deletion of this section heading. The staff finds this administrative change also acceptable.

38. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.3.3.8, delete this paragraph.

Evaluation: This change removes from the current Technical Specifications the requirement for fire detection instrumentation. The requirements for fire detection and suppression during PDMS are contained in the Fire Protection Program Evaluation document and in Section 7.2.2 of the PDMS SAR. Maintenance of an approved Fire Protection Program Evaluation prior to entry into PDMS is required by proposed PDMS license condition 2.F. This change implements Generic

Letter 88-12, dated August 2, 1988 entitled, "Removal of Fire Protection Requirements from Technical Specifications." The staff finds this change acceptable.

39. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.4, 3.4.1, 3.4.2, 3.4.9, 3.4.9.1, and 3.4.9.2, delete these paragraphs.

    Evaluation: These changes will remove requirements for reactor vessel water level monitoring, reactor coolant temperature controls, and assurance that the reactor vessel is open to the reactor building atmosphere. During PDMS, the reactor vessel will be drained, the decay heat generated from the residual fuel will be negligible, and the reactor vessel will be covered but not sealed. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds these changes acceptable.

40. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.5 and 3.5.1, delete these paragraphs.

    Evaluation: This change will remove the requirement for direct communications between the Control Room or the Command Center and personnel in the reactor building. Since there is no requirement for Control Room staffing during PDMS, the staff finds this change acceptable.

41. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.1.1.a, 3.6.1.1.b, and Table 3.6.2, delete these sections. Renumber Sections 3.6 and 3.6.1 as 3/4.1 and 3/4.1.1 respectively.

    Evaluation: These changes will remove requirements for primary containment integrity and deletion of the table listing penetrations without double isolation. Containment Integrity was applicable to only Mode 1 during defueling. The licensee is presently in Mode 3 and defueling is completed (see Chapter 2 of the PDMS TER for an explanation of Modes). Therefore, this requirement is no longer applicable. During PDMS, modifications to containment penetrations may be made as long as isolation is maintained. Technical Specifications for primary containment isolation are provided in the proposed PDMS Technical Specifications in Section 3.1.1.1 of the PDMS Technical Specifications (see Item 42 below). Listings of reactor containment penetrations, their function during PDMS and their isolation capabilities are provided in the PDMS SAR Section 7.2.1 and the PDMS TER Section 6.2.1. Based on the availability of appropriate information and controls in supporting documentation, the staff finds this change acceptable.

    The SE has been revised to include the renumbering of Sections 3.6 and 3.6.1 of the current Appendix A Technical Specifications to correct an administrative error. The February 20, 1992 version of the SE failed to include this requested change. The renumbering of the two sections is a format change only. The staff finds this change also acceptable.

42. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.1.2, under Applicability delete "Modes 2 and 3" and replace with "PDMS", change the number from 3.6.1.2 to 3.1.1.1.

Evaluation: The current technical specification requires primary containment isolation only for Modes 2 and 3 (see Chapter 2 of the PDMS TER for an explanation of Modes). This change specifies that the Limiting Condition for Operation is applicable to PDMS. The licensee is currently in Mode 3. Since this proposed change extends the current requirement to PDMS, the staff finds this change acceptable.

43. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.1.3, delete the paragraph in its entirety.

Evaluation: This change removes the requirement for Containment Air Lock operability during Mode 1 defueling (see Chapter 2 of the PDMS TER for a description of modes). Since the reactor has been defueled and is no longer in Mode 1 and the requirements for containment airlock operability during other modes is contained in related Technical Specifications, the staff finds this change acceptable. Additional requirements during PDMS pertaining to airlocks are found in proposed PDMS Technical Specification 3.1.1.3 (item 45 below).

44. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.1.4 and 3.6.1.5, delete these paragraphs.

Evaluation: These changes remove the limitations on primary containment pressure and air temperature. The reactor has been defueled. The primary containment will be vented to the atmosphere and maintained at ambient pressure or ventilated using the building purge system. There are no significant sources of heat that would result in an increase in the ambient temperature inside containment. Therefore, there is no necessity for pressure or temperature limitations during PDMS. It is expected that pressure changes will closely follow ambient atmospheric pressure. Temperature will remain relatively stable due to the massive heat sink of the building and its contents. The staff finds these changes acceptable.

45. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.1.6, delete the following:

> "3.6.1.6 Each Containment Air Lock shall be OPERABLE with at least one door closed unless otherwise specified per the criteria of Recovery Operations Plan Section 4.6.1.6.1.
>
> APPLICABILITY: Modes 2 and 3."

and replace with:

> "3.1.1.3 Each Containment Air Lock shall be OPERABLE with at least one door closed except when the air lock is being used for transit entry and exit in accordance with site-approved

procedures.

APPLICABILITY: PDMS

Evaluation: Normal entry and exit procedures require at least one door closed. Occasionally, items that exceed the internal dimensions of the air lock must be transported into and out of the reactor building necessitating opening both airlock doors. Procedures will minimize the amount of time both airlock doors are open. Considering the post-accident, inoperable and essentially defueled condition of the facility and the administrative controls for entry and exit during PDMS, the staff finds this change acceptable.

46. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.6.3, and 3.6.3.1, delete the paragraph in its entirety.

Evaluation: This change removes the requirements for operability of the Containment Purge Exhaust System. The Containment Purge Exhaust System will only be used when ventilation of primary containment is necessary, i.e., prior to a manned entry. No active continuous ventilation of the containment building is required. This is no longer a safety related system necessary to mitigate the consequences of an accident and limit offsite dose to within 10 CFR Part 100 limits considering the post-accident, inoperable and essentially defueled condition of the facility. Normal containment atmospheric breathing will be by a filtered pathway to the AFHB. Specifications for operability of the Containment Purge Exhaust System and its components, for ventilation prior to a manned entry, are provided in the PDMS SAR (7.2.1.3). Thus, due to the limited applicability of the Containment Purge Exhaust System and delineation of requirements in other documentation, the staff finds this change acceptable.

47. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.7.6, delete the section and Subsection 3.7.6.1 in their entirety.

Evaluation: This change removes the requirements for flood protection from the current TMI-2 Technical Specifications. Flood protection measures for TMI-2 are found in the PDMS SAR (7.1.4). Since the site is shared with TMI-1 (an operating reactor), the Technical Specifications (Section 3.14.1) for TMI-1 require periodic monitoring of the dike around the island.

The SE has been revised to include the deletion of Subsection 3.7.6.1. Reference to this subsection number was inadvertently omitted from the February 20, 1992 version of the SE. The February 20, 1992 version discusses deletion of Section 3.7.6, which includes subsection 3.7.6.1 but did not reference the subsection number in the SE. The staff finds this change also acceptable.

The staff is also updating the evaluation for this proposed change. The licensee has prepared a flood protection procedure, that has been

implemented, incorporating the requirements in the current technical specifications. The staff has reviewed the procedure, and has determined, in a letter to R. Dudley dated December 21, 1993, that the procedure incorporates the requirements contained in the current technical specifications.

48. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.7.7 and 3.7.7.1 delete these paragraphs in their entirety.

    Evaluation: This change removes the Control Room habitability requirements. There is no need to assure habitability of the control room for operator corrective and mitigative actions to ensure reactor safe shutdown. During PDMS, there is no requirement to staff the TMI-2 Control Room. The staff finds this change acceptable.

49. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.7.9, revise the section as follows: change the number from "3.7.9" to "3/4.4" and from "3.7.9.1" to "3.4.1;" add "3/4.4.1 Sealed Source Integrity;" change the reference in the first paragraph from "4.7.9.2" to "4.4.1.2;" and change the APPLICABILITY from "Modes 1, 2, and 3" to "PDMS." Change ACTION from "1. Either decontaminated or repaired or 2. Disposed of in accordance with Commission Regulations." to "1. Either decontaminate or repair, or 2. Dispose in accordance with Commission Regulations."

    Evaluation: These changes identify the requirement as applying to PDMS and improve the clarity, readability and consistency of the document. The staff finds these changes acceptable.

50. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.7.10 (includes 3.7.10.1 and 3.7.10.4), delete this section in its entirety.

    Evaluation: This change removes the specifications for fire suppression water systems and fire hose stations. Responsibility for site fire manual suppression has been transferred to the TMI-1 facility and associated Fire Protection Program Evaluation. This change is consistent with the staff position contained in NRC Generic Letter 88-12 dated August 2, 1988, which results in fire protection requirements in the technical specifications being transferred to the Fire Protection Program Evaluation. POL License Condition 2.F. requires implementation of an approved PDMS Fire Protection Program Evaluation prior to entry into PDMS. Specific commitments for TMI-2 fire protection systems and fire response are provided in the PDMS SAR (Section 7.2.2) and Fire Protection Program Evaluation. The staff finds this change acceptable.

51. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation 3.8 (includes 3.8.1, 3.8.1.1, 3.8.2, 3.8.2.1, 3.8.2.1.1, 3.8.2.1.2, and 3.8.2.2.1), delete the section in its entirety.

Evaluation: This change removes electrical power system specifications applicable to Mode 1 (see Chapter 2 of the PDMS TER for a description of Modes). Since the plant is no longer in Mode 1, the specifications are not applicable to the post-accident, inoperable and essentially defueled condition of the facility. The staff finds this change acceptable.

52. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.9, 3.9.1, 3.9.2, 3.9.3 and 3.9.4, delete these sections in their entirety.

Evaluation: These changes remove radioactive waste storage specifications (spent fuel storage pool and transfer canal) applicable to Modes 1 and 2 (see Chapter 2 of the PDMS TER for a description of Modes). Since the plant is no longer in Modes 1 or 2, the specifications are not applicable to TMI-2 now or during PDMS. All canisters containing fuel and core debris and radioactive waste from major decontamination activities have been removed from the TMI-2 facility. The fuel pool and transfer canal will be drained and maintained dry after the Accident Generated Water disposition is completed. Consequently, no requirements for fuel pool or transfer canal water levels are needed. The staff finds these changes acceptable.

53. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.9.12.1 and 3.9.12.2, delete these sections in their entirety.

Evaluation: This change removes specifications for operability of the ventilation systems for the Fuel Handling Building and the Auxiliary Building. The licensee commitments for maintenance and testing of these ventilation systems are provided in the PDMS SAR (7.2.6.1 and 7.2.6.2). The POL, requires (Paragraph 2.D.) that the licensee demonstrate that airborne concentrations within the AFHB during PDMS will not exceed a small percentage of release limits. The staff finds this change acceptable.

54. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.10.1, revise the section as follows: Renumber "3.10" with "3/4.3," renumber "3.10.1" with "3.3.1" replace "2400" with "50,000"; replace "the following areas" with "reactor vessel"; delete sub-items a through e; replace "Mode 1" with "PDMS"; under the heading ACTION replace "Limiting Condition for Operations" with "Limiting Condition for PDMS", replace "Specification 3.10.1" with "Specification 3.3.1"; and replace "Specification 6.9.2" with "Specification 6.8.2".

Evaluation: Changes to this specification revised upward the load limit over the reactor vessel from 2400 lbs to 50,000 lbs. The requested change also deletes load limitations over the incore instrument seal table and guide tubes, deep end of transfer canal canisters and areas not previously analyzed. These changes reflect the requirements established to protect against potential reconfiguration of the core debris outside the analyzed geometries used in the Defueling Completion

Report. (See Section 5.1.4 of the PDMS TER.) These changes also reflect the revised status of the facility, the reduced risk of accidents, and the estimated quantity of Special Nuclear Material (SNM) in the facility. The staff finds these changes acceptable.

The February 20, 1992 SE has been updated to correct an administrative oversight where the staff failed to evaluate the licensee proposal to change the wording under the heading ACTION from "Limiting Condition for Operations" to "Limiting Condition for PDMS". The staff finds this administrative change improves the clarity of the specification. The staff finds the change also acceptable.

55. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.10.2, delete this section in its entirety.

Evaluation: This change removes the specifications for load limits in the Fuel Handling Building. Since all the fuel canisters containing fuel and core debris have been removed from the TMI-2 facility and no reactor fuel remains in the Fuel Handling Building, no specifications are necessary. The staff finds this change acceptable.

56. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.1.1.2, add the following:

"3.1.1.2 The unfiltered leak rate from Containment with the RB Breather closed shall be less than 1/100 of the rate through the RB Breather.

APPLICABILITY: PDMS

ACTION: If the unfiltered leak rate from Containment with the RB Breather closed is greater than 1/100 of the rate through the RB Breather or if the trend indicates that the 1/100 value will be exceeded within one year, then:

a. Identify the excessive leakage path;

b. Make necessary repairs and/or adjustments;

c. Perform an additional unfiltered leak rate test; and

d. Prepare and submit a special report to the Commission pursuant to Specification 6.8.2 within the next 30 days."

Evaluation: This change adds specifications for an unfiltered leak rate test to ensure that the high-efficiency particulate air (HEPA) filtered reactor building breather continues to be the most probable leak path from the containment building. The staff finds this additional requirement acceptable because it provides a quantitative estimate of leak rate during PDMS.

57. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.2.1.1, add the following:

3/4.2 REACTOR VESSEL FUEL

3/4.2.1 REACTOR VESSEL FUEL REMOVAL/REARRANGEMENT

LIMITING CONDITIONS FOR PDMS

3.2.1.1 No more than 42 kg of fuel (i.e., $UO_2$) may be removed from the Reactor Vessel without prior NRC approval.

APPLICABILITY: PDMS

ACTION:

When more than 42 kg of fuel has been removed from the Reactor Vessel, suspend all further fuel removal activities and submit a safety analysis to the NRC for approval of this activity and any further fuel removal activities.

Evaluation: This change establishes limitations for removal of fuel from the Reactor Vessel to ensure that accidental criticality is precluded. The staff has determined (PDMS TER 5.1) that the Safe Fuel Mass Limit (SFML) for fuel (i.e., $UO_2$) in the reactor vessel is 93 kilograms. To assure that criticality calculations remain valid and that the geometry of the remaining fuel remains as defined in the criticality calculations, the proposed PDMS Technical Specifications prohibit taking any action which would result in the movement of 45% of the SFML (93 x 0.45 = 42 kilograms) from the reactor vessel without specific prior approval of the NRC. The staff finds this change acceptable.

58. Change: License DPR-73, Technical Specifications, Section 3, Limiting Conditions for Operation, 3.2.1.2, add the following:

"3.2.1.2 No more than 42 kg of fuel in the Reactor Vessel may be rearranged outside the geometries analyzed in the Defueling Completion Report and the criticality safety analyses contained in GPU Nuclear letter C312-92-2080, dated December 18, 1992, without prior NRC approval.

APPLICABILITY: PDMS

ACTION:

When more than 42 kg of fuel in the Reactor Vessel has been rearranged, suspend all further fuel rearrangement activities and submit a safety analysis to the NRC for approval of this activity and any further fuel rearrangement activities. If an external event were to occur that could potentially cause more than 42 kg of fuel in the Reactor Vessel to be rearranged, a report will be submitted to the NRC detailing the findings of any investigation into that potential rearrangement."

Evaluation: This change establishes limitations for rearrangement of fuel in the Reactor Vessel to ensure that accidental criticality is precluded (see PDMS TER 5.1). The staff finds this change acceptable.

The SE has been updated to include a reference to a licensee submittal in support of the licensee's conclusion. The staff finds the change also acceptable.

59. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.0.1, delete the paragraph and replace it with:

"Surveillance Requirements shall be met during PDMS or other conditions specified for individual Limiting Conditions for PDMS unless otherwise stated in an individual Surveillance Requirement."

Evaluation: This change removes the reference to the Recovery Operations Plan and places the Surveillance Requirements for PDMS in the proposed PDMS Technical Specifications which provides clarity and consistency in the Technical Specifications. The staff finds this change acceptable. Succeeding Items 60 through 82 similarly involve proposed changes to the current Recovery Operations Plan that will be incorporated in the proposed PDMS Technical Specifications.

60. Change: License No. DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements 4.0.2, in the first sentence delete "of the Recovery Operations Plan".

Evaluation: This change removes reference to the Recovery Operations Plan as related to Surveillance Requirements. Since the Recovery Operations Plan is not applicable to the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

61. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.0.3, delete the paragraph and replace it with the following:

"Failure to perform a Surveillance Requirement within the specified time interval shall constitute a failure to meet the OPERABILITY requirements for a Limiting Condition for PDMS. Exceptions to these requirements are stated in the individual Specifications. Surveillance Requirements do not have to be performed on inoperable equipment."

Evaluation: This change redefines the criteria for performance of a Surveillance Requirement to be more appropriate to the post-accident, inoperable and essentially defueled condition of the facility. The staff finds this change acceptable.

62. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.1, 4.1.1, 4.1.1.1, 4.1.1.2, 4.1.1.3, and 4.1.1.4. Delete these paragraphs in their entirety.

Evaluation: This change removes the surveillance requirements for assuring operability of systems for injection of borated cooling water for criticality control. Injection systems for borated cooling water are no longer needed for criticality control since the reactor has been defueled. The staff finds this change acceptable.

63. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.3, 4.3.1, 4.3.1.1, and Table 4.3-1. Delete these paragraphs and table.

Evaluation: This change removes the surveillance requirements for neutron monitoring instrumentation. Due to the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

64. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.3.3, 4.3.3.4, 4.3.3.5, and 4.3.3.7. Delete these paragraphs and associated Tables 4.3-5 and 4.3-7.

Evaluation: This change removes the surveillance requirements for operating reactors for the meteorological instrumentation, the essential parameters monitoring instrumentation, and the chlorine detection system. The essential parameters monitoring instrumentation, and the chlorine detection systems were only required during defueling (Mode 1). The meteorological instrumentation was only required during Modes 1 and 2 (see Chapter 2 of the PDMS TER for an explanation of facility modes). The facility is currently in Mode 3 and these requirements are not applicable. The licensee requested change deletes sections that are no longer applicable to a post-accident, inoperable and essentially defueled facility. The staff finds these changes acceptable.

The SE has been revised to include the deletion of section heading 4.3.3. This section heading was added by License Amendment 43, dated May 26, 1993. The February 20, 1992 SE, which predated the issuance of License Amendment 43 did not consider the elimination of this section. Since this license amendment removes all subsections to this section heading, the staff finds removal of the section heading is also acceptable.

65. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.3.3.8.1, 4.3.3.8.2, and 4.3.3.8.3. Delete these paragraphs and associated Table 4.3-11.

Evaluation: This change moves the surveillance requirements for fire detection instrumentation and circuits to the Fire Protection Program Evaluation document and Section 7.2.2. of the PDMS SAR. Maintenance of the fire protection program procedures is required in the Administrative Controls section (Section 6.7.1) of the proposed PDMS Technical Specifications. Implementation of the Fire Protection Program Evaluation is required by POL license condition 2.F. This change is consistent with NRC Generic Letter 88-12, dated August 2, 1988, entitled "Removal of Fire Protection Requirements from Technical Specifications." The staff finds this change acceptable.

66. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.4, 4.4.2, 4.4.9, 4.4.9.1, 4.4.9.1.1, and 4.4.9.1.2. Delete these paragraphs and associated Table 4.3-8.

Evaluation: This change removes Surveillance Requirements for reactor vessel water level monitoring and reactor coolant system chemical parameters. Since the reactor has been defueled and the reactor vessel drained, these surveillance requirements are no longer needed. The staff finds this change acceptable.

67. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.5 and 4.5.1. Delete these paragraphs.

Evaluation: This change removes the surveillance requirement for verifying that communication channels are open between the Control Room or the Command Center and personnel in the Reactor Building and fuel handling building. Since the control room and command center are not staffed during PDMS and considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

68. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.6, 4.6.1, 4.6.1.1a, and 4.6.1.1b. Delete these paragraphs.

Evaluation: This change removes surveillance requirements for primary containment integrity, specifically for the daily verification that modified containment penetrations are closed by a valve, blind flange, or deactivated automatic valve secured in its position. Containment Integrity was applicable only to Mode 1 (see Chapter 2 of the PDMS TER for an explanation of facility modes). The licensee is no longer in Mode 1. This surveillance requirement is not applicable now or during PDMS and can be deleted. Surveillance requirements of primary containment isolation are given in proposed PDMS Technical Specifications Section 4.1.1.1. The staff finds this change acceptable.

69. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, Section 4.6.1.2. Delete the section and replace it with the following:

"4.1.1.1 Primary CONTAINMENT ISOLATION shall be verified quarterly with the following exceptions:

a. Isolation valves that are locked closed shall be verified annually on a quarterly STAGGERED TEST BASIS. If a valve is found to be out of position, a check of all locked closed isolation valves shall be performed.

b. An independent verification of all isolation valve position changes shall be performed.

c. Bolted or welded blind flanges which form a containment isolation boundary and the Equipment Hatch shall be visually inspected for

signs of degradation and/or leakage every five years on an annual STAGGERED TEST BASIS. If a problem is discovered with a flange, a check of all bolted or welded blind flanges shall be performed."

Evaluation: Verification of containment isolation is necessary to ensure the control of the radioactive material remaining in the reactor containment building. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff concludes that the revised Technical Specifications provide adequate assurance of containment isolation. Thus, the staff finds this change acceptable.

The February 20, 1993 SE has been updated to include a requirement for surveillance of the equipment hatch. Amendment 16 to the PDMS SAR, dated January 18, 1993, submitted by the licensee, requested the change. The staff finds the surveillance requirement appropriate and the requested change also acceptable.

70. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.6.1.3 and 4.6.1.3.1. Delete these sections.

Evaluation: This change removes the surveillance requirement for Containment Air Lock operability during Mode 1 (see PDMS TER Chapter 2 for an explanation of facility modes). The reactor has been defueled and is no longer in Mode 1. This surveillance requirement is not applicable now or during PDMS and can be deleted. Other requirements for Containment Air Lock surveillance are contained in proposed PDMS Technical Specification 3.1.1.3 (see Item 45 above). The staff finds this change acceptable.

71. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.6.1.4a, 4.6.1.4b, and 4.6.1.5. Delete these sections.

Evaluation: These changes remove the surveillance requirements for primary containment pressure and air temperature. Since the reactor has been defueled and most containment systems deactivated, there is no significant source of heat within the containment. The containment will be passively vented to the atmosphere via the HEPA filtered breather line. Thus, there is no necessity to provide surveillance of the pressure and temperature instrumentation. The staff finds this change acceptable.

72. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.6.1.6 and 4.6.1.6.1. Delete these sections and replace them with the following:

"4.1.1.3 Each Containment Air Lock shall be demonstrated OPERABLE at least once per three months by performing a mechanical operability check of each Air Lock Door, including a visual inspection of the components and lubrication if necessary and by visually inspecting the door seals for significant degradation. When both Containment Air Lock doors are opened simultaneously, verify the following conditions:

a. The capability exists to expeditiously close at least one Air Lock door;

b. The Air Lock doors and Containment Purge are configured to restrict the outflow of air in accordance with site-approved procedures; and

c. The Air Lock doors are cycled to ensure mechanical operability within seven days prior to opening both doors."

Evaluation: The licensee proposes deleting the seal leakage pressure test for the containment air lock doors. The containment will not be pressurized, and seal leakage will be measured under proposed PDMS Technical Specification 4.1.1.2 (see Item 81 below). The remaining surveillance requirements (mechanical operability check and the containment unfiltered leak rate test) are adequate and in keeping with the post-accident, inoperable and essentially defueled condition of the facility. The staff finds these changes acceptable.

73. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.6.3 and 4.6.3.1. Delete these sections in their entirety.

Evaluation: This change removes the requirements for surveillance of the Containment Purge Exhaust System. The Containment Purge Exhaust system will only be used when ventilation of primary containment is necessary. This is no longer a safety related system necessary to mitigate the consequences of an accident and limit offsite dose to within 10 CFR Part 100 limits considering the post-accident, inoperable and essentially defueled condition of the facility. Specifications for operability of the system and its components are provided in the PDMS SAR 7.2.1.3. Thus, due to the limited applicability and delineation of requirements in other documentation, the staff finds this change acceptable.

74. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.7, 4.7.6, 4.7.6.1, 4.7.6.2 and 4.7.6.3. Delete these sections.

Evaluation: This change removes the requirements for surveillance for flood protection from the current TMI-2 Technical Specifications/Recovery Operations Plan. Since the site is shared with TMI-1 (an operating reactor), surveillance activities are common to both facilities and are contained in the Technical Specifications for TMI-1 (TMI-1 Technical Specification Section 3.14.1). Flood protection measures for TMI-2 are described in the PDMS SAR (Section 7.1.4). In addition, POL License Condition 2.F. requires the licensee to have implemented a flood protection plan prior to entry into PDMS. The staff finds this change acceptable.

75. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.7.7 and 4.7.7.1. Delete these sections.

Evaluation: This change removes the requirements to survey the Control

Room Emergency Air Cleanup System. License Amendment 30, issued May 27, 1988, eliminated the requirement for licensed operators at TMI-2 once the licensee achieved Mode 2 (see Chapter 2 of the PDMS TER for an explanation of facility modes). The surveillance requirement is not applicable now or during PDMS and can be deleted. Considering the post-accident, inoperable and essentially defueled condition of the facility, there is no need to assure habitability of the control room for operator corrective and mitigative actions to ensure reactor safe shutdown. Also, during PDMS, the TMI-2 Control Room need not be staffed. The staff finds this change acceptable.

76. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, Section 4.7.9, revise the section as follows: delete the number "4.7.9," change the numbers from "4.7.9.1, 4.7.9.2, and 4.7.9.3" to 4.4.1.1, 4.4.1.2 and 4.4.1.3, respectively. The words "startup sources and" in 4.7.9.2 (a) and (c) and "startup source and" also in (c) shall be deleted.

Evaluation: This change deletes reference to startup sources, which are no longer present at the TMI-2 facility. The staff finds this change acceptable.

The February 20, 1992 SE has been revised to include the reference to Section 4.7.9.2 immediately preceeding "(a) and (c)"and delete the word "sealed". The section reference was added to the above change description to improve clarity. The word "sealed" was removed from the above change description since its inclusion in the February 20, 1992 version of the SE was an administrative error. The staff finds the proposed changes also acceptable.

77. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.7.10. Delete Sections 4.7.10, 4.7.10.1.1, 4.7.10.1.2, 4.7.10.1.3, 4.7.10.4 and corresponding Table 4.7-1.

Evaluation: This change removes the Surveillance Requirements for fire suppression systems including fire hose stations from the current TMI-2 Technical Specifications. The site fire suppression responsibilities have been delegated to TMI-1 (in the Fire Protection Program Evaluation). Fire detection capabilities and Surveillance Requirements for TMI-2 are provided in the PDMS SAR 7.2.2. Additionally, the licensee is required, under POL license condition 2.F. to have implemented a PDMS Fire Protection Program Evaluation prior to entry into PDMS. This change is consistent with NRC Generic Letter 88-12, dated August 2, 1988 entitled "Removal of Fire Protection Requirements from Technical Specifications." The staff finds this change acceptable.

78. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.8. Delete Sections 4.8, 4.8.1, 4.8.1.1, 4.8.2, 4.8.2.1, 4.8.2.1.1, 4.8.2.1.2, 4.8.2.2.1, and 4.8.2.2.2.

Evaluation: This change removes the Surveillance Requirements for both AC and DC power for the facility. Considering the post-accident, inoperable and essentially defueled condition of the facility, and the

fact that no active systems are required to assure safe shutdown of the facility or mitigate the consequences of an accident that might result in offsite dose exceeding 10 CFR Part 100 limits, loss of electrical power would have no effect on safety at the facility. The staff finds this change acceptable.

79. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.9, 4.9.1, 4.9.2, 4.9.3, and 4.9.4. Delete these sections.

Evaluation: This change removes the Surveillance Requirements for water level monitoring of the spent fuel pool and the fuel transfer canal. Since all canisters containing fuel and core debris have been removed from the TMI-2 site and the spent fuel pool and fuel transfer canal will be drained and maintained dry for the majority of PDMS, Surveillance Requirements for water level are not needed. The staff finds this change acceptable.

80. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, Sections 4.9.12.1 and 4.9.12.2, delete these sections in their entirety.

Evaluation: This change removes the Surveillance Requirements for the Fuel Handling Building/Auxiliary Building Air Cleanup Systems. The licensee proposed deleting the requirement for operability of both the Fuel Handling Building and Auxiliary Building air cleanup systems. The staff has found the licensee proposal acceptable (See Item 53 above). These systems will remain operational with surveillance requirements for these systems given in the PDMS SAR 7.2.6.1 and 7.2.6.2. These systems are not safety related systems necessary to mitigate the consequences of an accident and limit offsite dose to within 10 CFR Part 100 limits. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

81. Change: License DPR-73, Recovery Operations Plan, Section 4, add the following Surveillance Requirements, 4.1.1.2.

4.1.1.2 The initial unfiltered leak rate test shall be performed two years following entry into PDMS. After the initial unfiltered leak rate test, the test frequency will be determined by comparing the ratios of the unfiltered leak rate to the RB Breather leak rate from previous and current tests. If the test results indicate that the ratio of unfiltered leakage to breather leakage is remaining constant or decreasing, then the next interval shall be five years.

If the test results indicate that the ratio of unfiltered leakage to breather leakage is increasing, i.e., the current ratio is greater than

the previous ratio, then the next interval shall be determined by the following equation:

$$N' = N \times \left[ \frac{(0.01 - R_p)}{(R_c - R_p)} - 1 \right]$$

where: $N'$ = the next test interval,
$N$ = the current test interval,
$R_p$ = the previous ratio of unfiltered leakage to RB Breather leakage
$R_c$ = the current ratio of unfiltered leakage to RB Breather leakage

The initial value of N' shall equal two years. N' shall be the truncated integer result from the above equation, in years, but not more than five years nor less than one year.

Only ratios for successful tests shall be used to determine the next test interval in the above equation. Following a failed test the next test interval shall be one year.

Evaluation: The licensee proposes the above surveillance requirement for the unfiltered leak rate test of the reactor building. The February 20, 1993 SE has been updated to include the specific surveillance requirement that was submitted by the licensee for review by Amendment 16 to the licensee PDMS SAR, dated January 18, 1993. Details of the surveillance requirement are consistent with the discussion contained in the initial SE. The staff finds that the requirement will ensure adequate surveillance by requiring periodic testing of containment isolation during PDMS. Future testing frequency is determined by test results. Therefore, the staff finds the change acceptable.

82. Change: License DPR-73, Recovery Operations Plan, Section 4, Surveillance Requirements, 4.2.1.1. and 4.2.1.2, add the following:

"4.2.1.1 None required as long as no fuel is removed from the Reactor Vessel.

4.2.1.2 None required as long as no fuel in the Reactor Vessel is rearranged."

Evaluation: A Limiting Condition for PDMS establishes specifications for removal and rearrangement of fuel from and within the reactor vessel. No Surveillance Requirements are needed unless fuel movement or rearrangement is performed. The staff finds this change acceptable.

83. Change: License DPR-73, Technical Specifications, Section 5, Design Features. Delete the entire section and replace with the following:

5.0 DESIGN FEATURES

5.1 CONTAINMENT

CONFIGURATION

5.1.1 The Containment Building is a steel lined, reinforced concrete building of cylindrical shape, with a dome roof and having the following design features:

a. Nominal inside diameter = 130 feet.

b. Nominal inside height = 157 feet.

c. Minimum thickness of concrete walls = 4 feet.

d. Minimum thickness of concrete roof = 3.5 feet.

e. Minimum thickness of concrete floor pad = 13.5 feet.

f. Nominal thickness of steel liner = 1/2 inch.

g. Net free volume = $2.1 \times 10^6$ cubic feet.

h. Design Pressure = 5.0 psig."

Evaluation: This change removes design features such as exclusion area, site boundary, and design temperature and consolidates the design features of the containment building into one section. The design features most important for ensuring containment and control of radioactive material at TMI-2 are those of the reactor containment building which are provided. The site exclusion area (current Technical Specification 5.5.1) and low population zone (current Technical Specification 5.1.2) are more appropriate for an operating facility. TMI-2 is essentially defueled and inoperable. No fission product release from the remaining core debris is expected, other than some potential, but insignificant airborne release of material. There is no accident scenario that would result in an offsite dose to the maximally exposed member of the public in excess of 25 rem to the whole body or a total radiation dose in excess of 300 rem to the thyroid from iodine exposure (see PDMS TER Section 5.4.13). Therefore, no exclusion zone or low population zone needs to be defined (10 CFR Part 100.11). These areas are identified in the TMI-1 Technical Specifications. The Site Boundary for gaseous effluents (current Technical Specifications 5.1.3) and the Site Boundary for liquid effluents (current Technical Specification 5.1.4) will be identified in the Offsite Dose Calculation Manual (see proposed PDMS Technical Specification 6.7.4 and Item 115 below). Containment design pressure and temperature (current Technical Specification 5.2.2) are no longer applicable to TMI-2. The total water

and steam volume of the reactor coolant system (current Technical Specification 5.4.2) is no longer appropriate since the system will be dewatered. Since the licensee proposed eliminating the requirement for maintaining the meteorological tower, the requirement for identifying the location of the meteorological tower (current Technical Specification 5.5 and 5.5.1) can be eliminated. Considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds these changes acceptable.

84. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.1.1, delete the entire section and replace with the following:

"6.1.1 The PDMS Manager is responsible for the management of overall unit operations at Unit 2 and shall delegate in writing the succession to this responsibility during absence."

Evaluation: This change establishes the responsibility for the facility during PDMS and provides clarification. The staff finds this change acceptable.

The SE has been updated to reflect a change in the title of the onsite TMI-2 manager. The February 20, 1992 version of the SE refers, in Section 6.1.1, to the "Manager, TMI-2 Department." The licensee, in Amendment 18, dated October 24, 1993, to the PDMS SAR, changed the title to "PDMS Manager." There is no change in the duties or responsibilities of this individual. The staff finds the change also acceptable.

85. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.2.1, delete the entire section and replace with the following:

"6.2.1 The GPU Nuclear Corporation (GPUNC) organization for unit management and technical support shall be as in Section 10.5 of the PDMS SAR."

Evaluation: This change deletes the requirement to maintain a separate organization plan that defines, in part, the Corporate Organization. The proposed change transfers the requirement to maintain the current corporate organization to Section 10.5 of the PDMS SAR. This is consistent with past staff guidance contained in Generic Letter 88-06 dated March 22, 1988, directing licensees to remove organizational charts from Technical Specifications. The staff finds this change acceptable.

86. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.2.2 and Table 6.2-1, delete the entire section and table and replace with the following:

"6.2.2 The unit organization shall be as described in Section 10.5 of the PDMS SAR and an individual qualified in radiation protection procedures shall be on site whenever Radioactive Waste Management activities are in progress."

Evaluation: This change removes the requirement to maintain a current diagram of unit organization in the Organizational Plan. The proposed change transfers the requirement to maintain current unit organization in Section 10.5 of the PDMS SAR. This is consistent with past staff guidance contained in Generic Letter 88-06, dated March 22, 1988, directing licensees to remove organizational charts from Technical Specifications. The staff finds the proposed change acceptable.

The change also removes all requirements from the current Technical Specifications for minimum shift crews and licensed operators at the facility. Licensed operators are no longer needed at TMI-2. Therefore, the staff finds the proposed change acceptable.

The licensee also proposes maintaining the requirement for an onsite individual qualified in radiation protection procedures whenever Radioactive Waste Management activities are in progress. The requirements or the site fire brigade are found in the Fire Protection Program Evaluation. Considering the post-accident, inoperable and essentially defueled condition of the facility, and that a reference is retained regarding organization requirements and administrative controls, the staff finds this change acceptable.

87. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.3.1, delete the second sentence and replace with "The requirements of ANSI N18.1-1971 that pertain to operator license qualifications for unit staff shall not apply."

Evaluation: This change removes the reference to Modes 2 and 3 and clarifies the wording (see Chapter 2 of the PDMS TER for an explanation of facility modes). The staff finds this change acceptable because during PDMS the mode of the facility is not relevant and operator license qualifications are not needed for a post-accident, inoperable and essentially defueled facility.

88. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.3.2, delete the paragraph and replace with the following:

"6.3.2 The management position responsible for radiological control or his deputy shall meet or exceed the qualifications of Regulatory Guide 1.8 of 1977. Each Radiological Controls Technician in a responsible position shall meet or exceed the qualifications of ANSI N18.1-1971, paragraphs 4.5.2 or 4.3.2, or be formally qualified through an NRC-approved TMI 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 function prior to their performance of those tasks. "

Evaluation: This change clarifies the qualification requirements for personnel responsible for radiological control during PDMS to ensure consistency. The staff finds this change acceptable.

89. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.4.1 and 6.4.2, delete these paragraphs and replace with the following:

"6.4.1 A retraining and replacement training program for the unit staff shall be maintained and shall meet or exceed the requirements and recommendations of Regulatory Guide 1.8 1977."

Evaluation: This change clarifies the training requirements which apply during PDMS. The change eliminates the requirement for a training program for the Fire Brigade from the current Technical Specifications. The requirement for Fire Brigade training is found in Section II, B.1 of the current Fire Protection Program Evaluation. The staff finds this change acceptable.

90. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1, delete the paragraph and replace with the following:

"The Vice President of each division within GPU Nuclear Corporation shall be responsible for ensuring the preparation, review, and approval of documents required by the activities described in Sections 6.5.1.1 through 6.5.1.7 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."

Evaluation: This change establishes and clarifies the responsibilities for technical review and control during PDMS. The staff finds this change acceptable.

91. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.1, replace "Technical Specification 6.8" with "Section 6.7", and in both the first and second sentences replace "changes" with "SUBSTANTIVE CHANGES", and "individual(s)/group" with "individual(s) or group". In the first sentence, replace "test" with "tests".

Evaluation: These changes improve the clarity and readability of the document. The staff finds these changes acceptable.

92. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.2, add the following:

"6.5.1.2 Proposed changes to the Technical Specifications shall be reviewed by a knowledgeable individual(s) or group other than the individual(s) or group who prepared the change."

Evaluation: This change establishes the requirement for independent review and evaluation of PDMS Technical Specification changes. The staff finds this change acceptable.

93. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.3, renumber the Paragraph

"6.5.1.4" and after components in the first sentence add "necessary to maintain the PDMS condition as described in the PDMS SAR".

Evaluation: This change ensures that the control applies to PDMS and provides clarity to the document. The staff finds this change acceptable.

94. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.4, renumber the Paragraph 6.5.1.3 and change "individual(s)/group" to "individual(s) or group".

Evaluation: This change is a format change and provides clarity to the document. The staff finds this change acceptable.

95. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.5, delete the paragraph and replace with the following:

"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(s)/group which performed the investigation."

Evaluation: This change removes the administrative controls related to the security plan from the TMI-2 license and establishes criteria for review of investigations of violations of Technical Specifications. The licensee maintains a combined physical security plan with TMI-1 (see TMI-2 License Condition 2.C.(2)). Administrative control of the site security plan is specified by TMI-1 Technical Specification 6.5.1.8. The criteria for review of investigations of violations of Technical Specifications is appropriate. The staff finds this change acceptable.

96. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.6, delete the paragraph and replace with the following:

"6.5.1.6 All REPORTABLE EVENTS shall be reviewed by an individual/group other than the individual/group which prepared the report."

Evaluation: This change removes the administrative controls related to review of the emergency plan and establishes criteria for independent review of REPORTABLE EVENTS. The emergency planning for TMI-2 is incorporated in TMI-1 planning. Considering the post-accident, inoperable and essentially defueled condition of the facility, there are no events which could result in a release approaching the levels established in the Protective Action Guide. The criteria for independent review of REPORTABLE EVENTS is appropriate. The staff finds this change acceptable.

97. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.7, delete the paragraph in its entirety.

Evaluation: This change removes administrative controls related to review of the Recovery Operations Plan. Since the requirements of the Recovery Operations Plan no longer apply to the facility during PDMS, the staff finds this change acceptable.

98. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.8, renumber the paragraph "6.5.1.7", delete "6.5.1.1 through 6.5.1.7" and replace with "Sections 6.5.1.1 through 6.5.1.6"; and after the second sentence add "Individuals responsible for reviews considered under Sections 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.

Evaluation: This change provides clarification and improves readability of the document. The staff finds this change acceptable.

99. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.9, delete the paragraph in its entirety.

Evaluation: This change removes administrative controls related to reviews of support division procedures at TMI-2. Since the support division will not exist during PDMS, elimination of this criteria is appropriate. The staff finds this change acceptable.

100. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.10, renumber this Section 6.5.1.8; delete the paragraph and replace with the following:

"6.5.1.8 Written records of activities performed in accordance with Sections 6.5.1.1 through 6.5.1.7 shall be maintained in accordance with Section 6.9."

Evaluation: This is a format and numbering change to improve the clarity and readability of the document. The staff finds this change acceptable.

101. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.1.11, renumber this Section 6.5.1.9; delete the paragraph and replace with the following:

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

Evaluation: This change renumbers the paragraphs to provide consistency in the document and clarifies the responsibilities for technical reviewers. The staff finds this change acceptable.

102. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.1, delete the paragraph and replace with the following:

"6.5.2.1 The Vice President of each division within GPU Nuclear Corporation shall be responsible for ensuring the independent safety review of the subjects described in Section 6.5.2.5 within his assigned area of review responsibility, as assigned in the GPUN Review and Approval Matrix."

Evaluation: This change reflects the revised organization which will be in place during PDMS and assigns the responsibility for independent safety review. The staff finds this change acceptable.

103. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.2, delete the second sentence of the paragraph, and substitute "individual or group" for Individual/group" twice in the first sentence.

Evaluation: This change clarifies the responsibility for independent safety reviews during PDMS. The current Technical Specification requires that an independent safety review be conducted on those TMI-2 documents that are determined to be REVIEW SIGNIFICANT. The term REVIEW SIGNIFICANT was created for and is unique to TMI-2 and applicable during the TMI-2 cleanup. The requirement for independent review of documents is transferred to Section 6.5.2.5 of the proposed PDMS Technical Specifications (see Item 106 below). Instead of identifying a category of documents that are REVIEW SIGNIFICANT, the actual document type is identified in the proposed PDMS Technical Specifications. The staff finds this change acceptable.

104. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.3 j, delete this item and renumber the following item.

Evaluation: This change removes administrative controls related to emergency plans, organization, procedures, and equipment. Rev. 3 to the Corporate Emergency Plan, dated April 10, 1990, combined the emergency action levels of both TMI-1 and TMI-2 once TMI-2 entered Mode 2 (see Chapter 2 of the PDMS TER for an explanation of facility modes). Since emergency response and actions for the site have been delegated to TMI-1 and considering the post-accident, inoperable and essentially defueled condition of the facility, the staff finds this change acceptable.

105. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.4, insert after the word utilized "as determined by the cognizant Vice President".

Evaluation: This change provides clarification as to what position is authorized to determine the need for consultants. The staff find this change acceptable.

106. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.5, delete this section in its entirety and replace with the following:

"6.5.2.5 The following subjects shall be independently reviewed by INDEPENDENT SAFETY REVIEWERS (ISRs) in the functionally assigned divisions:

a. Written safety evaluations of changes in the facilities 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 10 CFR 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 10 CFR 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 10 CFR 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 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.

f. Any other matters involving the plant which a reviewer deems appropriate for consideration or which is referred to the independent reviewers."

Evaluation: This change removes reference to the Safety Review Group (SRG) which no longer exists. The responsibilities of the Safety Review Group were assumed by the Independent Onsite Safety Review Group (IOSRG) on June 30, 1990. This change clarifies the independent reviewer requirements to reflect the organization and responsibilities established for PDMS. The Independent Onsite Safety Review Group requires independent safety review by Independent Safety Reviewers (ISRs). The staff finds this change acceptable.

107. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.6, delete the paragraph and replace with the following:

QUALIFICATIONS

"6.5.2.6 The ISRS shall either have a Bachelor Degree in Engineering or the Physical Sciences and five years of professional level experience in the area being reviewed or have nine years of appropriate experience in the field of his or her specialty. An individual performing reviews may possess competence in more than one specialty area. Credit towards experience will be given for advanced degrees on a one-for-one basis up to a maximum of two years."

Evaluation: This change deletes the term REVIEW SIGNIFICANT (see Item 13 above) and incorporates Section 6.5.2.8 of the current Technical Specifications in this section. There are also format changes to improve clarity and readability. The staff finds this changes acceptable.

108. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.7, delete "6.10" and replace with "6.9."

Evaluation: This change is a format revision to improve the clarity and readability of the document. The staff finds this change acceptable.

109. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.2.8, delete this section in its entirety.

Evaluation: This section is incorporated in its entirety in Section 6.5.2.6. The staff finds this administrative change acceptable.

110. Change: License DPR-73, Technical Specifications, Part 6, Administrative Controls, Section 6.5.3 and 6.5.3.1. Delete Section 6.5.3.1 in its entirety and replace with the following:

"6.5.3.1 Audits of unit activities shall be performed in accordance with the TMI-2 PDMS QA Plan. These audits shall encompass:

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

b. The performance of activities required by the PDMS QA Plan. The audit frequency shall be at least once per 24 months.

c. The Radiation Protection Plan and applicable implementing procedures. The audit frequency shall be at least once per 12 months.

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

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

f. 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.

g. The ODCM and implementing procedures at least once per 24 months.

h. Any other area of unit operation considered appropriate by the PDMS Manager or the Office of the President - GPUNC."

Evaluation: This change establishes the audit program for those programs and activities that will be in effect during PDMS. The proposed change deletes the requirement to perform audits on training and qualification program, the nonconformances and corrective actions program, and the emergency plan. The licensee has proposed adding audits on the ODCM. The licensee also proposed some administrative changes to improve the clarity and readability of the specification. The deletion of the training and qualification program audit and the nonconformances and corrective actions audit reflect the change in the facility from one that is actively being cleaned up to a stored facility. The emergency plan audit is required by the Site emergency plan administered by TMI-1. The staff finds these changes acceptable.

The SE has been updated to reflect a change in the title of the onsite TMI-2 manager. The February 20, 1992 version of the SE refers, in Section 6.5.3h., to the "Manager, TMI-2 Department". The licensee, in Amendment 18, dated October 24, 1993, to the PDMS SAR, changed the title to "PDMS Manager." There is no change in the duties or responsibilities of this individual. The staff finds the change also acceptable.

III. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.3.2, in the first sentence delete "either the SRG (until implementation of IOSRG) or the Independent Onsite Safety Review Group (upon its implementation)", and replace with "the IOSRG", delete the last sentence and add the following sentence:

"Upper management shall be informed in accordance with the TMI-2 PDMS QA Plan."

Evaluation: The Safety Review Group (SRG) is no longer in existence. Its function is performed by the Independent Onsite Safety Review Group (IOSRG). The requirement for IOSRG review of audits is removed from this section since it is redundant with the requirement of PDMS proposed Technical Specifications 6.5.4.3.a and 6.5.2.5.e. Adding

the proposed sentence clarifies when documents are to be forwarded to management. The staff finds these changes acceptable.

112. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.4, and succeeding subsections 6.5.4.1, 6.5.4.1.1, 6.5.4.2, 6.5.4.2.1, 6.5.4.2.2., 6.5.4.3, 6.5.4.4, 6.5.4.5, 6.5.4.6, 6.5.4.7, and 6.5.4.8. Delete these sections in their entirety.

Evaluation: This change removes the administrative controls related to the Safety Review Group (SRG). Since the Safety Review Group no longer exists and has been replaced by an Independent Onsite Safety Review Group (IOSRG) with its attendant administrative controls contained in PDMS proposed Technical Specification 6.5.4, the staff finds this change acceptable.

113. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.5.5, renumber this section (as 6.5.4) and subsections and make the following changes: delete 6.5.5.1.1 in its entirety; in 6.5.5.2a delete "except for an additional position to support to TMI-2 activities"; in 6.5.5.3a delete the word "safety"; in 6.5.5.3c delete "Office of the Director, TMI-2" and replace with "PDMS Manager"; and in 6.5.5.6 renumber with 6.5.4.6 and replace "Office of the Director, TMI-2" with "PDMS Manager".

Evaluation: These changes provide clarification of responsibilities and positions in place during PDMS and improves readability and consistency of the document. The staff finds these changes acceptable.

The SE has been updated to reflect a change in the title of the onsite TMI-2 manager. The February 20, 1992 version of the SE refers, in Sections 6.5.53c and 6.5.4.6, to the "Manager, TMI-2 Department." The licensee, in Amendment 18, dated October 24, 1993, to the PDMS SAR, changed the title to "PDMS Manager." There is no change in the duties or responsibilities of this individual. The staff finds the change also acceptable.

114. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.6, delete 6.6.1a, 6.6.1b, and 6.6.1c and replace with the following:

a. The Nuclear Regulatory Commission shall be notified and/or a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50, and

b. Each REPORTABLE EVENT shall undergo an independent safety review pursuant to Specification 6.5.2.5 d."

Evaluation: This change reflects the revision in definitions and criteria during PDMS for REPORTABLE EVENTS and their investigations. The change also removes reference to the Safety Review Group (SRG) which has been superseded by the Independent Onsite Safety Review Group (IOSRG). The staff finds this change

acceptable.

115. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.8, renumber section heading 6.8 to 6.7. Change "MEMBER(S)" in 6.8.4a. to "MEMBERS", change "TABLE II" in 6.8.4 a. 2) to "Table 2", change "10 CFR 20.106" in 6.8.4 a. 3) to "10 CFR 20.1301", and renumber Section 6.8.4 to 6.7.4. Delete Sections 6.8.1, 6.8.2, and 6.8.3 in their entirety and replace with the following:

"6.7 PROCEDURES AND PROGRAMS

6.7.1 Written procedures shall be established, implemented, and maintained for the activities necessary to maintain the PDMS condition as described in the PDMS SAR. Examples of these activities are:

a. Technical Specification implementation.

b. Radioactive waste management and shipment.

c. Radiation Protection Plan implementation.

d. Fire Protection Program implementation.

e. Flood Protection Program implementation.

6.7.2 Each procedure required by Section 6.7.1, and SUBSTANTIVE CHANGES thereto, shall be reviewed and approved as described in Section 6.5.1 prior to implementation and shall be reviewed periodically as required by ANSI N18.7-1976.

6.7.3 Temporary changes to procedures in Section 6.7.1 above may be made provided:

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

b. The change is approved by two members of the responsible organization qualified in accordance with Section 6.5.1.9 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; and

c. The change is documented, reviewed and approved as described in Section 6.5.1 within 14 days of implementation."

Evaluation: This change removes references and administrative controls related to programs (such as Recovery Operations Plan) no longer applicable to the post-accident, inoperable and essentially defueled condition of the facility. The proposed changes to Section 6.7.3 are consistent with Standard Technical Specifications, Babcock and Wilcox Plants (NUREG-1430). Additional

information is provided in the PDMS SAR 7.2.4 and the PDMS TER Section 6.6.3. The staff finds this change acceptable.

The SE has been revised to correct an error in the reference to the regulations ("Appendix B, Table II, to "Appendix B, Table 2") and to reference the current regulations (10 CFR 20.1301). The staff finds these changes also acceptable.

116. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.9, renumber to 6.8. and make the following changes:

In current Section 6.9.1 delete "submitted" in the second line and add this sentence after the first sentence "Some of the reporting requirements of Title 10, Code of Federal Regulations are repeated below" and renumber the Section 6.8.1.

Evaluation: These changes provide clarification and consistency to the document and improve readability. They delete sections and reports that are no longer required or have been completed and modify remaining reporting requirements consistent with current regulations. The staff finds the changes acceptable.

117. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.9.1.2. Change 6.9.1.2 to 6.8.1.2 and delete "prior to May 1" and replace with "within 60 days after January 1". Renumber 6.9.1.4 to 6.8.1.3; delete the number 6.9.1.5 and retain the narrative; in the renumbered 6.8.1.3a, add "for whom monitoring was required" after the parenthetical expression "(including contractors)", replace "manrem" with "person-rem"; change footnote 2 at the bottom of the page to reference "Article 20.2206 of 10 CFR 20" instead of "Article 20.407 of 10 CFR 20"; and replace the paragraph symbol "§" with the word "article"; after "e.g." in the narrative of 6.8.1.3a, delete "reactor operations and", "inservice inspection", and "(describe maintenance), waste processing, and refueling." Place next sentence in parentheses. Delete the existing 6.9.1.5b in its entirety.

Evaluation: The SE has been updated to reflect the changes in the current Appendix A Technical Specifications that resulted from the issuance of License Amendment 43, dated May 26, 1993. The submittal date for the annual radiological operating report is changed consistent with License Amendment 43, dated May 26, 1993, and the sections are renumbered. Renumbered section 6.8.1.3a is revised to remove ambiguity on reporting requirements. The SE is revised to include minor changes in wording to improve clarity and readability of the document, reference a renumbered section, reference the current regulations, and remove reference to operations at the facility that are no longer applicable in the permanently shutdown and defueled condition. The staff finds these administrative changes acceptable.

118. Change: License DRP-73, Technical Specifications, Section 6, Administrative Controls, add the following:

BIENNIAL REPORTS

6.8.1.4 Biennial reports (i.e., once every two years) covering the activities of the unit as described below during the previous two calendar years shall be submitted prior to March 1 of every other year.

Reports required on a biennial basis shall include:

a. All changes made to the PDMS SAR during the previous two calendar years.

b. All changes, tests, or experiments meeting the requirements of 10 CFR 50.59.

Evaluation: These changes update the February 20, 1992 SE by including this technical specification on reporting requirements that was incorporated in the current technical specifications by License Amendment 43, dated May 26, 1993. The staff finds this administrative change acceptable.

119. Change: License DRP-73, Technical Specifications, Section 6, Administrative Controls, renumber Section 6.9.2 to 6.8.2.

Evaluation: This is an update to the February 20, 1992 SE. License Amendment 43, dated May 26, 1993 changed the section numbering of the requirement to submit special reports. This change is an administrative change to provide clarification and consistency to the document and improve readability. The staff finds this change acceptable.

120. Change: License DRP-73, Technical Specifications, Section 6, Administrative Controls, add the following:

6.8.3 NONROUTINE REPORTS

A report shall be submitted in the event that an Exceptional Occurrence as specified in Section 6.13 occurs. The report shall be submitted under one of the report schedules described below.

PROMPT REPORTS

6.8.3.1 Those events specified as prompt report occurrences shall be reported within 24 hours by telephone, telegraph, or facsimile transmission to the NRC followed by a written report to the NRC with 30 days.

THIRTY DAY EVENT REPORTS

6.8.3.2 Nonroutine events not requiring a prompt report as described in Subsection 6.8.3.1, shall be reported to the NRC either within 30 days of their occurrence or within the time limit specified by the reporting

requirement of the corresponding certification or permit issued pursuant to Sections 401 or 402 of PL 92-500, the Federal Water Pollution Control Act (FWPCA) Amendment of 1972, whichever time duration following the nonroutine event shall result in the earlier submittal.

CONTENT OF NONROUTINE REPORTS

6.8.3.3 Written 30-day reports and, to the extent possible, the preliminary telephone, telegraph, or facsimile reports shall (a) describe, analyze, and evaluate the occurrence, including extent and magnitude of the impact, (b) describe the cause of the occurrence, and (c) indicate the corrective action (including any significant changes made in procedures) taken to preclude repetition of the occurrence and to prevent similar occurrences involving similar components or system."

Evaluation: These changes are administrative requirements necessary to implement sections of the proposed PDMS Technical Specifications. The staff finds these changes acceptable.

121. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.10, renumber to 6.9. and make the following changes:

In the current Technical Specifications 6.10.1 (PDMS proposed Technical Specifications 6.9.1) delete 6.10.1c. In 6.10.2 (now 6.9.2) part e. delete "Specifications 6.8.1.a, b., c., and f." and replace with "Recovery Technical Specification 6.8.1 and PDMS Technical Specification 6.7.1"; part n. delete "performed pursuant to these" and replace with "previously required by the"; part o. after Operating add ", Recovery, or PDMS"; part q. delete "the SRG or by"; part t. delete "all individuals entering radiation control areas" and add "all individuals for whom monitoring was required".

Evaluation: These changes delete redundant requirements, provide clarification to the document, and update the references to documents, programs and activities that will be in place during PDMS. The staff finds these changes acceptable.

The SE is being updated by changing the wording in the requirement for records retention for monitored individuals as requested by the licensee in Amendment 18, dated October 24, 1993, to the PDMS SAR. Records of all personnel monitored, regardless of whether or not they entered a radiation control area, would be required to be maintained. The staff finds this change also acceptable.

122. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, Section 6.11, renumber to 6.10; Section 6.12 renumber to 6.11 and change the reference to "20.203(c)(2) of 10 CFR 20" to "20.1601 of 10 CFR 20"; Section 6.13 renumber to 6.12 and change the reference to "10 CFR 20.106" to "10 CFR 20.1301" in the current Technical Specification 6.13a.2. In Section 6.12 replace "Changes to the ODCM" with "SUBSTANTIVE CHANGES to the ODCM". Change "Specification 6.10.2 v" to "6.9.2 v"

Evaluation: This section of the SE has been updated from the February 20, 1992 version. A detailed discussion of Section 6.12 is no longer included in the SE since it has already been incorporated in the current Appendix A Technical Specifications by License Amendment 43, dated May 26, 1993. The proposed change from "changes" to "substantive changes" will eliminate the requirement to document minor typographical changes that are discovered in the ODCM, and reference current regulations. These changes are administrative in nature and will improve the clarity of the document. The staff finds these changes acceptable.

123. Change: License DPR-73, Technical Specifications, Section 6, Administrative Controls, add the following:

6.13 EXCEPTIONAL OCCURRENCES

UNUSUAL OR IMPORTANT ENVIRONMENTAL EVENTS

6.13.1 Any occurrence of an unusual or important event that causes or could potentially cause significant environmental impact causally related with station operation shall be recorded and reported to the NRC per Subsection 6.8.3.1. The following are examples of such events: excessive bird impaction events on cooling tower structures or meteorological towers (i.e., more than 100 in any one day); onsite plant or animal disease outbreaks; unusual mortality of any species protected by the Endangered Species Act of 1973; fish kills near or downstream of the site.

EXCEEDING LIMITS OF RELEVANT PERMITS

6.13.2 Any occurrence of exceeding the limits specified in relevant permits and certificates issued by other Federal and State agencies which are reportable to the agency which issued the permit shall be reported to the NRC in accordance with the provisions of Subsection 6.8.3.2. This requirement shall apply only to topics of National Environmental Protection Act (NEPA) concern within the requirements of the permits and certificates noted in Section 6.14.

6.14 STATE AND FEDERAL PERMITS AND CERTIFICATES

Section 401 of PL 92-500 requires any applicant for a Federal license or permit to conduct any activity which may result in any discharge into navigable waters to provide the licensing agency a certification from the State having jurisdiction that the discharge will comply with applicable provisions of Section 301, 302, 306, and 307 of the FWPCA. Section 401 of PL 92-500 further requires that any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with the applicable limitations. Certifications provided in accordance with Section 401 set forth conditions on the Federal license or permit for which the certification is provided. Accordingly, the licensee shall comply with the requirements set forth in the 401 certification dated November 9, 1977 or its currently applicable revision, issued to the licensee by the

Pennsylvania Department of Environmental Resources, which requires, among other things, that the licensee comply with effluent limitations stipulated in the NPDES PERMIT.

Changes or additions to the required Federal and State permits and certificates for the protection of the environment noted in this subsection shall be reported to the NRC within 30 days. In the event that the licensee initiates or becomes aware of a request for changes to any of the water quality requirements, limits or values stipulated in any certification or permit issued pursuant to Section 401 and 402 of PL 92-500, NRC shall be notified concurrently with the authorizing agency. The notification to the NRC shall include an evaluation of the environmental impact of the revised requirement, limit or value being sought.

If during NRC review of the proposed change, it is determined that a potentially severe environmental impact could result from the change, the NRC will consult with the authorizing agency to determine the appropriate action to be taken."

Evaluation: These sections, with slight wording modifications, are transferred from Appendix B of the current Environmental Technical Specifications to the proposed PDMS Technical Specifications. These changes are administrative requirements necessary to implement sections of the proposed PDMS Technical Specifications. The staff finds these changes acceptable.

The SE has been revised to include a change in the reference section number from 6.13 to 6.14. This change is a result of reformatting the technical specifications. The staff finds this administrative change also acceptable.

124. Change: License DPR-73, Environmental Technical Specifications, Appendix B, make the following changes: Sections 4.6, 4.6.1, 4.6.2, and 5.4, are renumbered 6.13, 6.13.1, 6.13.2, and 6.14, respectively, and are transferred to the proposed PDMS Technical Specifications. Sections 3.0, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 5.0, 5.1, 5.2, 5.3, 5.3.1, 5.3.2, 5.5, 5.6, and 5.6.1 are section headings that contained studies or requirements that have been completed or deleted by previous amendments. Removal of the section headings does not change the licensee's requirements. Sections 1.0, 5.7, 5.7.1, 5.7.2 and 5.8 are administrative requirements necessary to maintain the Appendix B Technical Specifications as a separate document. Sections 4.6 and 5.4 of the current technical specifications (6.13 and 6.14 of the proposed PDMS Technical Specifications), Section 5.6.2, 5.6.2a, 5.6.2b and 5.6.2c in the current technical specifications (6.8.3, 6.8.3.1, 6.8.3.2, and 6.8.3.3 of the proposed PDMS Technical Specifications) are administrative requirements necessary to implement sections of the proposed PDMS Technical Specifications and are renumbered and included in the proposed PDMS Technical Specifications.

Evaluation: Since both the radiological and non-radiological requirements are retained in either the Offsite Dose Calculation Manual

or the proposed PDMS Technical Specifications, the staff finds these changes acceptable.

The SE has been updated to reflect the changes in numbering of section titles and headings in the current Appendix B Technical Specifications resulting from License Amendment 43, dated May 26, 1993. The staff finds the changes also acceptable.

125. Change: License DPR-73, Appendix A Technical Specifications, delete the following list of headings and empty tables: 3.3.2, 3.4.1, 3.7.4, 3.7.10.2, 3.7.10.3, 3.7.11, Table 3.8-1, Table 3.8-2, 4.1.3, 4.1.3.1, 4.3.2, Table 4.3-2, Table 4.3-3, 4.3.3.8.4, 4.4.1, 4.7.4, 4.7.4.1, 4.7.10.2, 4.7.10.3.1, 4.7.10.3.2, 4.7.11, 4.8.1.2, 4.8.1.3, 5.4.1, 6.5.1.2, 6.7, 6.8.2.2, 6.9.1.6, 6.9.1.7, 6.9.1.8, 6.9.1.9, and 6.9.1.10.

Evaluation: These sections and tables consist of headings with no associated text and empty tables. Since these sections and tables contain no specifications or requirements, they may be deleted. The staff finds these changes acceptable.

The SE has been updated to reflect the deletion of Table 4.3-3. The February 20, 1992 version of the SE included Table 4.3-3. Table 4.3-3 was deleted from the current Technical Specifications by License Amendment 47, dated December 6, 1993. The staff finds the change also acceptable.

The staff has concluded that 1) the TMI-2 facility can safely be placed in long-term monitored storage and the facility configuration during storage under both routine and accident conditions will not result in impacts that exceed those identified in the staff's PEIS Supplement 3, 2) no credible accident for the TMI-2 facility in the defueled condition could result in the release of radioactive materials to the environment in quantities that would require protective actions for the public, and 3) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed defueled, non-operating monitored storage condition of the reactor. Therefore, the staff finds the proposed amendments to the license acceptable.

## 5.0 STATE CONSULTATION

In accordance with the Commission regulations, a representative of the Commonwealth of Pennsylvania was contacted on December 21, 1993 about the proposed issuance of the amendment. The Commonwealth of Pennsylvania had no comments on the proposed amendment at that time.

## 6.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR Parts 51.20 and 51.92, an environmental impact statement, Supplement 3 of the Programmatic Environmental Impact Statement Related to Decontamination and Disposal of Radioactive Waste Resulting from March 28, 1979 Accident, Three Mile Island Nuclear Station, Unit 2 - Final Supplement Dealing with Post-Defueling Monitored Storage and Subsequent Cleanup (PEIS Final Supplement 3), was prepared and issued August 1989. That document

concluded that the proposed PDMS of TMI-2 would not have a significant impact on the quality of the human environment.

In accordance with 10 CFR 51.21, 51.30 and 51.35, the staff has also prepared (58 FR 68673, dated December 28, 1993) an Environmental Assessment regarding the proposed PDMS that evaluates the 19 amendments to the licensee PDMS SAR issued since the August 1989 PEIS Supplement 3 was prepared. The purpose of the evaluation was to determine if the PEIS Supplement 3 is still valid. The staff concluded in the Environmental Assessment that the licensee proposal is still within the scope of the impacts evaluated in PEIS Supplement 3 and will not have a significant effect on the quality of the human environment.

## 7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, or create the possibility of a new or different kind of accident from any accident previously evaluated, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration. The Commission finds that (1) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed activities, and (2) such activities will be conducted in compliance with the Commission regulations and (3) the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

Principal Contributor: Michael T. Masnik

Date: December 28, 1993