



GPU Nuclear, Inc.  
Three Mile Island  
Nuclear Station  
Route 441 South  
Post Office Box 480  
Middletown, PA 17057-0480  
Tel 717-948-8461

August 22, 2007

5928-07-20169

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 2 (TMI-2)  
POSSESSION ONLY LICENSE NO. DPR-73  
DOCKET NO. 50-320  
UPDATE 7 OF THE POST-DEFUELING MONITORED STORAGE SAFETY  
ANALYSIS REPORT

Dear Sirs:

Enclosed are the revised pages associated with Update 7 of the Post-Defueling Monitored Storage Safety Analysis Report (PDMS SAR) for TMI-2. The last revision of the PDMS SAR was issued as Update 6 on August 22, 2005. Update 7 revises the PDMS SAR to reflect the current plant configuration and administrative processes. The revised pages are indicated on the list of effective pages, which should be kept in the front of the binder containing the PDMS SAR. Also included are binder sleeves for Update 7. Changes made from Update 6 to Update 7 of the PDMS SAR are identified by bold face type within the document, and a bold line vertically drawn in the margin adjacent to the portion actually changed.

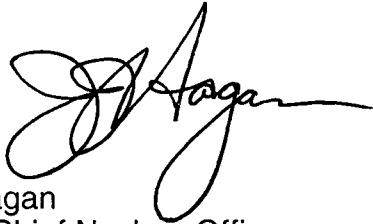
GPU Nuclear will issue the next revision of the PDMS SAR no later than 24 months from the date of this submittal.

Amssol

Amss

Please contact Adam Miller of TMI-1 Regulatory Assurance at (717) 948-8128 if you have any questions regarding Update 7 to the PDMS SAR.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Hagan", with a stylized, flowing script.

Joseph J. Hagan  
President & Chief Nuclear Officer

JJH/awm

cc: USNRC TMI-2 Region I Inspector  
USNRC TMI-2 Project Manager  
NRC Regional Administrator, Region I  
Ten (10) Copies to DCD  
File 07043

August 22, 2007

**UNIT 2 PDMS Safety Analysis Report Instruction Memorandum  
UPDATE 7**

CORRECT ADDRESS  
IF NECESSARY

RETURN TO: Debbie Marshbank, Procedure Distribution Control, South Office Building

Please update your Unit 2 PDMS SAR Update 7 with the Attachments as instructed below. Also, please sign the acknowledgement at the bottom of this memo and return to Debbie Marshbank at the address shown above.

Remove

Insert

| Section                | Page No                             | Update | Page No                             | Update |
|------------------------|-------------------------------------|--------|-------------------------------------|--------|
| PDMS SAR<br>Cover Page | 1 <sup>st</sup> page of<br>document | 6      | 1 <sup>st</sup> page of<br>document | 7      |
| Effective Pages        | 1 - 16                              | 6      | 1-16                                | 7      |
| Chapter 7              | 7.2-25/26                           | 4/6    | 7.2-25/26                           | 4/7    |
| Chapter 10             | 10i                                 | 6      | 10i                                 | 7      |
|                        | 10.5-1/2                            | 6/6    | 10.5-1/2                            | 7/7    |
|                        | 10.5-3                              | 6      | 10.5-3                              | 7      |
|                        | 10.5-4                              | 6      | 10.5-4                              | 7      |

Additional Instructions/Comments

These replacement pages are the revised pages associated with Update 7 of the PDMS SAR.

NOTE: Also included in this package are binder sleeves for Update 7.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Ext. No.)

\_\_\_\_\_  
(Date)

**TMI-2**

**POST DE-FUELING**

**MONITORED STORAGE**

**SAFETY ANALYSIS**

**REPORT**

**UPDATE 7**  
**August 2007**

**TMI-2 POST-DEFUELING MONITORED STORAGE**

**SAFETY ANALYSIS REPORT**

**UPDATE 7  
AUGUST 2007**

**TMI-2**

**POST DE-FUELING**

**MONITORED STORAGE**

**SAFETY ANALYSIS**

**REPORT**

**UPDATE 7**  
**August 2007**

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| TC-1          | 4               | 8/01        |
| 1-i           | 4               | 8/01        |
| 1.1-1         | 2               | 8/97        |
| 1.1-2         | 2               | 8/97        |
| 1.1-3         | 2               | 8/97        |
| 1.1-4         | 2               | 8/97        |
| 1.1-5         | 2               | 8/97        |
| 1.1-6         | 4               | 8/01        |
| 1.2-1         | 4               | 8/01        |
| 1.2-2         | 2               | 8/97        |
| 1.2-3         | 4               | 8/01        |
| 1.3-1         | 2               | 8/97        |
| 1.3-2         | 2               | 8/97        |
| 1.3-3         | 2               | 8/97        |
| 1.3-4         | 2               | 8/97        |
| 1.3-5         | 2               | 8/97        |
| 1.4-1         | 4               | 8/01        |
| 1.4-2         | 4               | 8/01        |
| 1.4-3         | 4               | 8/01        |
| 1.4-4         | 5               | 8/03        |
| 1.4-5         | 2               | 8/97        |
| 1.4-6         | 2               | 8/97        |
| 1.4-7         | 2               | 8/97        |
| 1.4-8         | 2               | 8/97        |
| 1.4-9         | 2               | 8/97        |
| 1.5-1         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 2-i           | 2               | 8/97        |
| 2-ii          | 2               | 8/97        |
| 2.1-1         | 4               | 8/01        |
| 2.1-2         | 2               | 8/97        |
| 2.1-3         | 2               | 8/97        |
| 2.1-4         | 4               | 8/01        |
| 2.2-1         | 2               | 8/97        |
| 2.3-1         | 2               | 8/97        |
| 2.4-1         | 2               | 8/97        |
| 2.4-2         | 3               | 8/99        |
| 2.4-3         | 2               | 8/97        |
| 2.4-4         | 2               | 8/97        |
| 2.4-5         | 2               | 8/97        |
| 2.4-6         | 2               | 8/97        |
| 2.5-1         | 2               | 8/97        |
| 3-i           | 2               | 8/97        |
| 3-ii          | 2               | 8/97        |
| 3-iii         | 6               | 8/05        |
| 3-iv          | 6               | 8/05        |
| 3-v           | 6               | 8/05        |
| 3-vi          | 2               | 8/97        |
| 3-vii         | 2               | 8/97        |
| 3-viii        | 2               | 8/97        |
| 3-ix          | 2               | 8/97        |
| 3-x           | 2               | 8/97        |
| 3-xi          | 2               | 8/97        |



## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 3-xii         | 2               | 8/97        |
| 3-xiii        | 2               | 8/97        |
| 3.1-1         | 2               | 8/97        |
| 3.1-2         | 3               | 8/99        |
| 3.1-3         | 2               | 8/97        |
| 3.1-4         | 2               | 8/97        |
| 3.1-5         | 2               | 8/97        |
| 3.1-6         | 2               | 8/97        |
| 3.1-7         | 4               | 8/01        |
| 3.1-8         | 2               | 8/97        |
| 3.1-9         | 6               | 8/05        |
| 3.1-10        | 3               | 8/99        |
| 3.1-11        | 2               | 8/97        |
| 3.1-12        | 6               | 8/05        |
| 3.1-13        | 3               | 8/99        |
| 3.1-14        | 2               | 8/97        |
| 3.1-15        | 4               | 8/01        |
| 3.1-16        | 4               | 8/01        |
| 3.1-17        | 2               | 8/97        |
| 3.1-18        | 2               | 8/97        |
| 3.1-19        | 2               | 8/97        |
| 3.1-20        | 4               | 8/01        |
| 3.1-20a       | 6               | 8/05        |
| 3.1-21        | 4               | 8/01        |
| 3.1-22        | 6               | 8/05        |
| 3.1-22a       | 3               | 8/99        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 3.1-23        | 5               | 8/03        |
| 3.1-24        | 2               | 8/97        |
| 3.1-25        | 2               | 8/97        |
| 3.1-26        | 2               | 8/97        |
| 3.1-27        | 2               | 8/97        |
| 3.1-28        | 2               | 8/97        |
| 3.1-29        | 2               | 8/97        |
| 3.1-30        | 2               | 8/97        |
| 3.1-31        | 2               | 8/97        |
| 3.1-32        | 2               | 8/97        |
| 3.1-33        | 2               | 8/97        |
| 3.1-34        | 2               | 8/97        |
| 3.1-35        | 2               | 8/97        |
| 3.1-36        | 2               | 8/97        |
| 3.1-37        | 2               | 8/97        |
| 3.1-38        | 2               | 8/97        |
| 3.1-39        | 2               | 8/97        |
| 3.1-40        | 2               | 8/97        |
| 3.1-41        | 2               | 8/97        |
| 3.1-42        | 2               | 8/97        |
| 3.1-43        | 4               | 8/01        |
| 3.2-1         | 2               | 8/97        |
| 3.2-2         | 2               | 8/97        |
| 3.2-3         | 2               | 8/97        |
| 3.2-4         | 2               | 8/97        |
| 3.3-1         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 3.3-2         | 2               | 8/97        |
| 3.4-1         | 2               | 8/97        |
| 3.5-1         | 2               | 8/97        |
| 3.5-2         | 2               | 8/97        |
| 3.5-3         | 2               | 8/97        |
| 3.6-1         | 2               | 8/97        |
| 3.7-1         | 2               | 8/97        |
| 3.7-2         | 2               | 8/97        |
| 3.7-3         | 2               | 8/97        |
| 3.7-4         | 2               | 8/97        |
| 3.7-5         | 2               | 8/97        |
| 3.7-6         | 2               | 8/97        |
| 3.7-7         | 2               | 8/97        |
| 3.7-8         | 2               | 8/97        |
| 3.7-9         | 2               | 8/97        |
| 3.7-10        | 2               | 8/97        |
| 3.7-11        | 2               | 8/97        |
| 3.7-12        | 2               | 8/97        |
| 3.7-13        | 2               | 8/97        |
| 4-i           | 2               | 8/97        |
| 4-ii          | 2               | 8/97        |
| 4-iii         | 2               | 8/97        |
| 4-iv          | 2               | 8/97        |
| 4.0-1         | 2               | 8/97        |
| 4.1-1         | 2               | 8/97        |
| 4.1-2         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 4.1-3         | 2               | 8/97        |
| 4.1-4         | 2               | 8/97        |
| 4.1-5         | 2               | 8/97        |
| 4.2-1         | 2               | 8/97        |
| 4.3-1         | 2               | 8/97        |
| 4.3-2         | 2               | 8/97        |
| 4.3-3         | 2               | 8/97        |
| 4.3-4         | 2               | 8/97        |
| 4.3-5         | 2               | 8/97        |
| 4.3-5a        | 2               | 8/97        |
| 4.3-5b        | 2               | 8/97        |
| 4.3-6         | 2               | 8/97        |
| 4.3-7         | 2               | 8/97        |
| 4.3-8         | 1               | 6/95        |
| 4.3-9         | 1               | 6/95        |
| 4.3-10        | 1               | 6/95        |
| 4.3-11        | 1               | 6/95        |
| 4.3-12        | 1               | 6/95        |
| 4.3-13        | 1               | 6/95        |
| 4.3-14        | 1               | 6/95        |
| 4.3-15        | 1               | 6/95        |
| 4.3-16        | 1               | 6/95        |
| 4.3-17        | 2               | 6/95        |
| 4A-1          | 2               | 8/97        |
| 4A-2          | 2               | 8/97        |
| 4A-3          | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 4A-4          | 2               | 8/97        |
| 4A-5          | 2               | 8/97        |
| 4A-6          | 2               | 8/97        |
| 4A-7          | 2               | 8/97        |
| 4A-8          | 2               | 8/97        |
| 5-i           | 2               | 8/97        |
| 5-ii          | 2               | 8/97        |
| 5-iii         | 2               | 8/97        |
| 5-iv          | 2               | 8/97        |
| 5-v           | 2               | 8/97        |
| 5-vi          | 2               | 8/97        |
| 5-vii         | 2               | 8/97        |
| 5.0-1         | 2               | 8/97        |
| 5.1-1         | 2               | 8/97        |
| 5.1-2         | 2               | 8/97        |
| 5.1-3         | 2               | 8/97        |
| 5.1-4         | 2               | 8/97        |
| 5.1-5         | 2               | 8/97        |
| 5.2-1         | 2               | 8/97        |
| 5.2-2         | 2               | 8/97        |
| 5.3-1         | 2               | 8/97        |
| 5.3-2         | 2               | 8/97        |
| 5.3-3         | 2               | 8/97        |
| 5.3-4         | 2               | 8/97        |
| 5.3-5         | 2               | 8/97        |
| 5.3-6         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 5.3-7         | 2               | 8/97        |
| 5.3-8         | 2               | 8/97        |
| 5.3-9         | 2               | 8/97        |
| 5.3-10        | 2               | 8/97        |
| 5.3-11        | 2               | 8/97        |
| 5.3-12        | 2               | 8/97        |
| 5.3-13        | 2               | 8/97        |
| 5.3-14        | 2               | 8/97        |
| 5.3-15        | 2               | 8/97        |
| 5.3-16        | 2               | 8/97        |
| 5.3-17        | 2               | 8/97        |
| 5.3-18        | 2               | 8/97        |
| 5.3-19        | 2               | 8/97        |
| 5.3-20        | 2               | 8/97        |
| 5.3-21        | 2               | 8/97        |
| 5.3-22        | 2               | 8/97        |
| 5.3-23        | 2               | 8/97        |
| 5.3-24        | 2               | 8/97        |
| 5.A-1         | 2               | 8/97        |
| 5.A-2         | 2               | 8/97        |
| 5.A-3         | 2               | 8/97        |
| 5.A-4         | 2               | 8/97        |
| 5.A-5         | 2               | 8/97        |
| 5.A-6         | 2               | 8/97        |
| 5.A-7         | 2               | 8/97        |
| 5.A-8         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 5.A-9         | 2               | 8/97        |
| 5.A-10        | 2               | 8/97        |
| 5.A-11        | 2               | 8/97        |
| 5.A-12        | 2               | 8/97        |
| 5.A-13        | 2               | 8/97        |
| 5.A-14        | 2               | 8/97        |
| 5.A-15        | 2               | 8/97        |
| 5.A-16        | 2               | 8/97        |
| 5.A-17        | 2               | 8/97        |
| 5.A-18        | 2               | 8/97        |
| 5.A-19        | 2               | 8/97        |
| 5.A-20        | 2               | 8/97        |
| 5.A-21        | 2               | 8/97        |
| 5.A-22        | 2               | 8/97        |
| 5.A-23        | 2               | 8/97        |
| 5.A-24        | 2               | 8/97        |
| 5.A-25        | 2               | 8/97        |
| 5.A-26        | 2               | 8/97        |
| 5.A-27        | 2               | 8/97        |
| 5.A-28        | 2               | 8/97        |
| 5.A-29        | 2               | 8/97        |
| 5.B-1         | 2               | 8/97        |
| 5.B-2         | 2               | 8/97        |
| 5.B-3         | 2               | 8/97        |
| 5.B-4         | 2               | 8/97        |
| 6-i           | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 6-ii          | 2               | 8/97        |
| 6-iii         | 2               | 8/97        |
| 6-iv          | 2               | 8/97        |
| 6-v           | 2               | 8/97        |
| 6-vi          | 2               | 8/97        |
| 6-vii         | 2               | 8/97        |
| 6-viii        | 2               | 8/97        |
| 6-ix          | 2               | 8/97        |
| 6-x           | 2               | 8/97        |
| 6-xi          | 2               | 8/97        |
| 6-xii         | 2               | 8/97        |
| 6.0-1         | 5               | 8/03        |
| 6.1-1         | 3               | 8/99        |
| 6.1-2         | 2               | 8/97        |
| 6.1-3         | 3               | 8/99        |
| 6.1-4         | 3               | 8/99        |
| 6.1-5         | 2               | 8/97        |
| 6.2-1         | 3               | 8/99        |
| 6.2-2         | 2               | 8/97        |
| 6.2-3         | 2               | 8/97        |
| 6.2-4         | 2               | 8/97        |
| 6.2-5         | 2               | 8/97        |
| 6.2-6         | 2               | 8/97        |
| 6.2-7         | 3               | 8/99        |
| 6.2-8         | 2               | 8/97        |
| 6.2-9         | 2               | 8/97        |



## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 6.2-10        | 2               | 8/97        |
| 6.2-11        | 2               | 8/97        |
| 6.2-12        | 2               | 8/97        |
| 6.2-13        | 2               | 8/97        |
| 6.2-14        | 2               | 8/97        |
| 6.2-15        | 2               | 8/97        |
| 6.2-16        | 2               | 8/97        |
| 6.2-17        | 2               | 8/97        |
| 6.2-18        | 2               | 8/97        |
| 6.2-19        | 3               | 8/99        |
| 6.2-20        | 2               | 8/97        |
| 6.2-21        | 3               | 8/99        |
| 6.2-22        | 3               | 8/99        |
| 6.2-23        | 2               | 8/97        |
| 6.3-1         | 2               | 8/97        |
| 6.3-2         | 2               | 8/97        |
| 6.3-3         | 2               | 8/97        |
| 6.3-4         | 2               | 8/97        |
| 6.3-5         | 2               | 8/97        |
| 6.3-6         | 2               | 8/97        |
| 6.3-7         | 2               | 8/97        |
| 6.4-1         | 2               | 8/97        |
| 6.5-1         | 2               | 8/97        |
| 6.5-2         | 2               | 8/97        |
| 6.5-3         | 3               | 8/99        |
| 6.5-4         | 3               | 8/99        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 6.5-5         | 2               | 8/97        |
| 6.5-6         | 2               | 8/97        |
| 6.5-7         | 2               | 8/97        |
| 6.5-8         | 3               | 8/99        |
| 6.5-9         | 3               | 8/99        |
| 6.5-10        | 3               | 8/99        |
| 7-i           | 2               | 8/97        |
| 7-ii          | 2               | 8/97        |
| 7-iii         | 2               | 8/97        |
| 7-iv          | 2               | 8/97        |
| 7-v           | 2               | 8/97        |
| 7-vi          | 2               | 8/97        |
| 7-vii         | 2               | 8/97        |
| 7-viii        | 2               | 8/97        |
| 7.0-1         | 2               | 8/97        |
| 7.1-1         | 2               | 8/97        |
| 7.1-2         | 2               | 8/97        |
| 7.1-3         | 2               | 8/97        |
| 7.1-4         | 4               | 8/01        |
| 7.1-5         | 4               | 8/01        |
| 7.1-6         | 6               | 8/05        |
| 7.1-7         | 2               | 8/97        |
| 7.1-8         | 2               | 8/97        |
| 7.1-9         | 2               | 8/97        |
| 7.2-1         | 2               | 8/97        |
| 7.2-2         | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 7.2-3         | 6               | 8/05        |
| 7.2-4         | 2               | 8/97        |
| 7.2-5         | 2               | 8/97        |
| 7.2-6         | 6               | 8/05        |
| 7.2-7         | 2               | 8/97        |
| 7.2-8         | 4               | 8/01        |
| 7.2-9         | 4               | 8/01        |
| 7.2-10        | 2               | 8/97        |
| 7.2-11        | 2               | 8/97        |
| 7.2-12        | 2               | 8/97        |
| 7.2-13        | 6               | 8/05        |
| 7.2-14        | 4               | 8/01        |
| 7.2-15        | 6               | 8/05        |
| 7.2-16        | 2               | 8/97        |
| 7.2-17        | 2               | 8/97        |
| 7.2-18        | 4               | 8/01        |
| 7.2-19        | 6               | 8/05        |
| 7.2-20        | 4               | 8/01        |
| 7.2-21        | 2               | 8/97        |
| 7.2-22        | 5               | 8/03        |
| 7.2-23        | 5               | 8/03        |
| 7.2-24        | 6               | 8/05        |
| 7.2-25        | 4               | 8/01        |
| 7.2-26        | 7               | <b>8/07</b> |
| 7.2-27        | 2               | 8/97        |
| 7.2-28        | 6               | 8/05        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 7.2-29        | 2               | 8/97        |
| 7.2-30        | 2               | 8/97        |
| 7.2-31        | 2               | 8/97        |
| 7.2-32        | 6               | 8/05        |
| 7.2-33        | 2               | 8/97        |
| 7.2-34        | 2               | 8/97        |
| 7.2-35        | 2               | 8/97        |
| 7.2-36        | 2               | 8/97        |
| 7.2-37        | 3               | 8/99        |
| 7.2-38        | 2               | 8/97        |
| 7.2-39        | 2               | 8/97        |
| 7.2-40        | 2               | 8/97        |
| 7.2-41        | 2               | 8/97        |
| 7.2-42        | 2               | 8/97        |
| 7.2-43        | 2               | 8/97        |
| 7.2-44        | 2               | 8/97        |
| 7.2-45        | 2               | 8/97        |
| 7.2-46        | 2               | 8/97        |
| 7.2-47        | 2               | 8/97        |
| 7.2-48        | 2               | 8/97        |
| 7.2-49        | 2               | 8/97        |
| 7.2-50        | 2               | 8/97        |
| 7.2-51        | 2               | 8/97        |
| 7.2-52        | 2               | 8/97        |
| 8-i           | 1               | 6/95        |
| 8-ii          | 1               | 6/95        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u> | <u>Update #</u> | <u>Date</u> |
|---------------|-----------------|-------------|
| 8.1-1         | 2               | 8/97        |
| 8.1-2         | 2               | 8/97        |
| 8.1-3         | 2               | 8/97        |
| 8.1-4         | 2               | 8/97        |
| 8.1-5         | 2               | 8/97        |
| 8.1-6         | 2               | 8/97        |
| 8.1-7         | 2               | 8/97        |
| 8.1-8         | 2               | 8/97        |
| 8.1-9         | 2               | 8/97        |
| 8.1-10        | 2               | 8/97        |
| 8.1-11        | 2               | 8/97        |
| 8.1-12        | 2               | 8/97        |
| 8.1-13        | 2               | 8/97        |
| 8.2-1         | 2               | 8/97        |
| 8.2-2         | 2               | 8/97        |
| 8.2-3         | 2               | 8/97        |
| 8.2-4         | 2               | 8/97        |
| 8.2-5         | 2               | 8/97        |
| 8.2-6         | 2               | 8/97        |
| 8.2-7         | 2               | 8/97        |
| 8.2-8         | 2               | 8/97        |
| 8.2-9         | 2               | 8/97        |
| 8.2-10        | 2               | 8/97        |
| 8.2-11        | 2               | 8/97        |
| 8.2-12        | 2               | 8/97        |

## TMI-2 POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

### List of Effective Pages

| <u>Page #</u>    | <u>Update #</u> | <u>Date</u> |
|------------------|-----------------|-------------|
| <u>Chapter 9</u> |                 |             |
| Deleted          |                 |             |
| 10-i             | 7               | 8/07        |
| 10-ii (Deleted)  | 4               | 8/01        |
| 10.0-1           | 2               | 8/97        |
| 10.1-1           | 2               | 8/97        |
| 10.2-1           | 4               | 8/01        |
| 10.3-1           | 4               | 8/01        |
| 10.4-1           | 5               | 8/03        |
| 10.5-1           | 7               | 8/07        |
| 10.5-2           | 7               | 8/07        |
| 10.5-3           | 7               | 8/07        |
| 10.5-4           | 7               | 8/07        |

#### 7.2.6.5.3 Evaluation

In preparation for PDMS, various building seams, link seals, and major cracks have been repaired to the extent practical to minimize expected leakage from storms and high groundwater levels. The leakage rates and flowpaths experienced to date do not affect plant equipment required for PDMS. Additionally, the Sump Pump Discharge and WDL system are operational to transfer accumulated water to minimize potential spread of contamination due to localized flooding.

#### 7.2.6.6 Sewers

##### 7.2.6.6.1 PDMS Function

The basic function of the sewage collection system is to transport sewage from TMI-2 structures to the Sewage Treatment Plant. The PDMS configuration is shown on GPUN Drawing 302-151.

##### 7.2.6.6.2 System Description

Sewage from the temporary personnel access facility (TPAF) in the Turbine Building is routed to the Sewage Treatment Plant (STP) which serves both TMI-1 and TMI-2. The major operational portion of the Sewer System is underground gravity flow piping that provides for the transport of sewage from the Unit 2 support facilities to the STP.

##### 7.2.6.6.3 Evaluation

The Sewage Treatment Plant will process sewage from the TPAF. The majority of TMI-2 sewage piping is underground below the frost line. The original plant sanitary waste/sewage system is deactivated.

#### 7.2.6.7 Domestic Water System

##### 7.2.6.7.1 PDMS Function

During PDMS, portions of the existing domestic water system will remain operational to provide domestic water services required during PDMS.

##### 7.2.6.7.2 System Description

The domestic water system is maintained as a modified operational system. Unit 2 is supplied with domestic water from Unit 1 which is then distributed to Unit 2 support facilities. Domestic water is provided to the radwaste seal water unit in the Auxiliary Building, to the TPAF in the Turbine Building, and to several outbuildings. The PDMS configuration is shown on GPUN Drawings 302-158 Sht. 4.

#### 7.2.6.7.3 Evaluation

Since personnel access into the plant will be infrequent, only one source of domestic water is required in the Turbine Building. The Auxiliary Building header supplies domestic water to the seal water unit. Unit 1 and Unit 2 support facilities will remain operational; therefore, domestic water will continue to be supplied.

#### 7.2.6.8 Control Room Ventilation System

##### 7.2.6.8.1 PDMS Function

The Control Room Ventilation System will be maintained in an operational condition to support PDMS activities. This system provides fresh, filtered, heated or cooled air in sufficient quantity to support personnel occupancy and equipment protection.

##### 7.2.6.8.2 System Description

The Control Room Ventilation System consists of one supply fan (AH-C-16B) running in a forced ventilation mode during normal year round conditions. The supply fan will primarily recirculate the control room air as it is heated/cooled. A small amount of fresh air (outside air) will be force supplied by bypass booster fan (AH-C-16X). Exhaust fan (AH-E-35) will return control room air to the suction of supply fan (AH-C-16B). A small amount of the control room air will be "exhausted" out of this recirc mode, primarily by exfiltration dampers in the control room and via the kitchen and toilet fans. This provides for a small amount of air change per day.

Control Room air temperature is monitored by a **temperature element** located in the Control Room return air duct. The **temperature element** provides signals to a **programmable thermostat**, which controls heating or cooling as conditions dictate. Two steps of heating are available for freeze protection and **cooling is** available from the 10 ton air conditioner which also reduces Control Room humidity.

Neither cooling or heating functions will operate unless supply fan (AH-C-16B) is running and satisfying a flow switch in the supply air duct.

Additional outside air can be provided by performing special operations if the chiller malfunctions and/or additional cool outside air is desired.

##### 7.2.6.8.3 Evaluation

During PDMS, Control Room ventilation and air handling equipment provides a filtered pathway for active operation to meet industrial and radiological requirements. The Control Room Ventilation System is maintained operational for the maintenance and surveillance entries into the TMI-2 Control Room and in response to off-normal conditions.



**CHAPTER 10**  
**ADMINISTRATIVE FUNCTIONS**  
**TABLE OF CONTENTS**

| <u>SECTION</u> | <u>TITLE</u>   | <u>PAGE</u> |
|----------------|--|-------------|
| 10.0           | INTRODUCTION   | 10.0-1      |
| 10.1           | QUALITY ASSURANCE PLAN   | 10.1-1      |
| 10.2           | SECURITY PLAN  | 10.2-1      |
| 10.3           | EMERGENCY PLAN   | 10.3-1      |
| 10.4           | RADIATION PROTECTION PROGRAM   | 10.4-1      |
| 10.5           | ORGANIZATION   | 10.5-1      |
| 10.5.1         | President and Chief Nuclear Officer                                      | 10.5-1      |
| 10.5.2         | Vice President GPU Nuclear Oversight                                     | 10.5-2      |
| 10.5.3         | GPU Nuclear <b>Responsible Engineer</b> Three Mile Island Unit 2 (TMI-2) | 10.5-2      |
| 10.5.4         | <b>Employee Concerns Program</b>   | 10.5-2      |
| 10.5.5         | <b>TMI-2 Company Nuclear Review Board</b>                                | 10.5-2      |
| 10.5.6         | Manager, PDMS  | 10.5-3      |
| 10.5.7         | Organizational Commitments   | 10.5-3      |
| FIGURE         |  |             |
| <u>NO.</u>     | <u>TITLE</u>   | <u>PAGE</u> |
| 10.5-1         | GPU NUCLEAR ORGANIZATIONAL CHART   | 10.5-4      |

The organizational elements responsible for the PDMS phase of TMI-2 are shown on Figure 10.5-1. The specific responsibilities are discussed below. Additionally, the PDMS Technical Specifications prescribe specific requirements for staff qualifications, training, and the review and audit of TMI-2 activities.

As part of the sale of TMI-1, GPU Nuclear entered into an agreement with AmerGen for TMI-2 services. Under this agreement and as a contractor subject to GPU Nuclear's ultimate direction and control, AmerGen will provide all services, materials and equipment required to maintain TMI-2 in Post-Defueling Monitored Storage (PDMS). Services provided by AmerGen will meet all the requirements of the Safety Analysis Report, Technical Specifications and Quality Assurance Program. Services include:

- Management services;
- Operations, maintenance and testing;
- Radwaste operations;
- Quality Assurance;
- Radiation controls and health physics;
- Environmental controls;
- Security;
- Safety;
- Administrative services, including logistical support, information technology support and procurement services;
- Engineering and Licensing;
- Warehousing and housekeeping;
- Support services required in connection with the performance of routine corrective and preventative maintenance;
- Interface with the NRC as necessary in connection with inspections, audits, site visits or meetings;
- Maintain required NRC licensing documents for TMI-2; and
- Prepare regulatory correspondence for GPU Nuclear signature or file on behalf of GPU Nuclear, to the extent permitted under applicable NRC regulations, all documents required in connection with PDMS of TMI-2.

**On March 7, 2001 the NRC issued an Order approving the application regarding the proposed merger of GPU, Inc. and FirstEnergy Corp. As part of this order it was recognized that the holders of the TMI-2 license, GPU Nuclear, Metropolitan Edison Company, Jersey Central Power & Light Company and Pennsylvania Electric Company would become subsidiaries of FirstEnergy Corp. Thus any reference to FirstEnergy is made based on this relationship.**

Figure 10.5-1 also shows the AmerGen organization which will provide the above services.

10.5.1. President and Chief Nuclear Officer

The President and Chief Nuclear Officer is responsible to the **FirstEnergy Nuclear Committee of the Board** to provide top level direction on all activities associated with the safe and efficient management and oversight of all TMI-2 activities. This position also serves as the GPU Nuclear Cognizant Officer.

10.5.2 Vice President GPU Nuclear Oversight

The Vice President, GPU Nuclear Oversight is responsible to ensure the TMI-2 PDMS Quality Assurance Program is maintained and implemented in accordance with the PDMS Quality Assurance Plan, and applicable policies and procedures, applicable laws, regulations, licenses and technical requirements. Additionally, the **Vice President, GPU Nuclear Oversight** is responsible to manage, direct and provide support to the GPU Nuclear Employee Concerns Program and is the sponsor of the TMI-2 **Company Nuclear Review Board (CNRB)**.

10.5.3 GPU Nuclear **Responsible Engineer** Three Mile Island Unit 2 (TMI-2)

The GPU Nuclear **Responsible Engineer**, Three Mile Island Unit 2 (TMI-2) has the overall responsibility for the management of TMI-2 during PDMS. **This overall responsibility may be shared by more than one individual.**

10.5.4 **Employee Concerns Program**

**An Employee Concerns Program is provided for GPU Nuclear. The Vice President, GPU Nuclear Oversight, is responsible for the program and will appoint an individual to administer the program. If necessary this individual will have access to the Chief Nuclear Officer and FirstEnergy Nuclear Committee of the Board.**

**This individual is accessible on a confidential basis, if desired, to anyone in the company or its contracted employees having a nuclear or radiation safety concern he or she considers is not being adequately addressed. This individual is empowered to investigate such matters, identify any needed actions and seek its resolution. This individual will reply to the person who raised the concern.**

10.5.5 TMI-2 **Company Nuclear Review Board (CNRB)**

Independent oversight is provided by the TMI-2 CNRB. **The CNRB** serves to independently assure that the TMI-2 structures, systems and components are maintained so as to protect the health and safety of the workers, the public and the environment and to enable effective and efficient dismantlement and decommissioning in the future. The **CNRB** is sponsored by the Vice President GPU Nuclear Oversight.

#### 10.5.6 Manager, PDMS

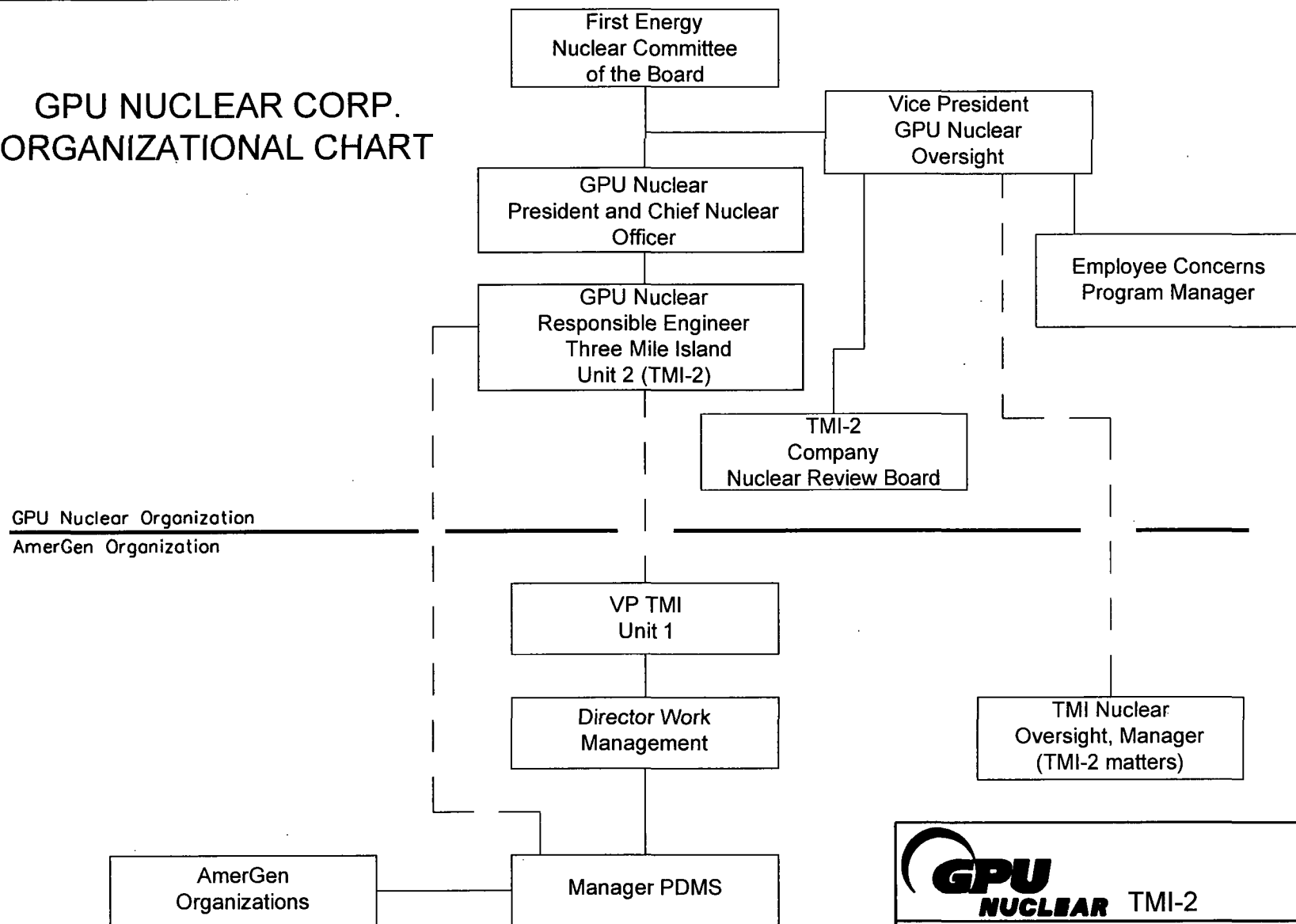
The Manager, PDMS has the first-level management responsibility for maintaining the TMI-2 PDMS condition. The Manager, PDMS is directly responsible for the operations and maintenance activities associated with the TMI-2 PDMS.

#### 10.5.7 Organizational Commitments


TMI-2 License Amendment and Technical Specification Change Request No. 78, submitted to the NRC on April 6, 2000, requested organizational and administrative changes that will exist following the sale of the Oyster Creek Nuclear Generating Station to AmerGen. Attachment 3 to that submittal listed a number of commitments for TMI-2 and a general commitment to list the commitments in the PDMS SAR. The listing, issued in TMI-2 Technical Specification Amendment No. 54 **as modified to reflect current conditions**, is as follows:

1. The GPU Nuclear Cognizant Officer will have overall responsibility for TMI-2. A description of responsibilities and qualifications for this position is addressed in the PDMS Quality Assurance (QA) Plan.
2. A **FirstEnergy** employee or third party contractor will be assigned to the TMI site.
3. The **individual responsible for the Employee Concerns Program** will have access, if necessary, to the **FirstEnergy Nuclear Committee of the Board**. This function is described in the PDMS Quality Assurance Plan.
4. GPU Nuclear will periodically assess AmerGen performance with support from other GPU (owners group) organizations as needed (e.g. GPU Internal Audits, Contracts, Legal, etc.).
5. GPU Nuclear will establish a TMI-2 **Company Nuclear Review Board** that will advise the GPU Nuclear Cognizant Officer. A description of responsibilities and qualifications is addressed in the PDMS Quality Assurance Plan.
6. All Quality Assurance audit reports prepared by AmerGen for TMI-2 will be provided to the GPU Nuclear Cognizant Officer.
7. GPU Nuclear will conduct a periodic QA Plan audit of AmerGen. The audit and frequency is specified in the GPU Nuclear PDMS Quality Assurance Plan.
8. A GPU Nuclear employee or third party contractor (ultimately responsible to GPU Nuclear) will review and approve all 10 CFR 50.59 evaluations unique to TMI-2 and all evaluations involving a TMI-2 facility change. This is incorporated in the TMI Review and Approval Matrix.
9. A GPU Nuclear employee or third party contractor (ultimately responsible to GPU Nuclear) will review and approve proposed changes to the emergency preparedness program that are unique to TMI-2.

# GPU NUCLEAR CORP. ORGANIZATIONAL CHART



GPU Nuclear Organization  
AmerGen Organization

|  |                                     |
|--|-------------------------------------|
|  <b>GPU NUCLEAR</b> TMI-2 |                                     |
| GPU NUCLEAR CORP.<br>ORGANIZATIONAL CHART  |                                     |
| PDMS SAR<br>FIGURE: 10.5-1   | UPDATE 7 - Aug. 2007<br>PAGE 10.5-4 |

CAD FILE: S1A,SKO,00,1000,001-.0203  
THIS IS A COMPUTER GENERATED DRAWING.  
DO NOT REVISE MANUALLY