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August 24, 2011
TMI-11-115

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 9 OF THE POST-DEFUELING MONITORED STORAGE SAFETY ANALYSIS REPORT

Dear Sirs:

Enclosed are the revised pages associated with Update 9 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 8 on August 24, 2009. Update 9 revises the PDMS SAR to reflect the current plant configuration and administrative processes, and to make some editorial changes. 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 9. Changes made from Update 8 to Update 9 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.

A053
NSIE

Please contact Mike Fitzwater of TMI-1 Regulatory Assurance at (717) 948-8228 if you have any questions regarding Update 9 to the PDMS SAR.

Sincerely,

Danny L. Pace
President

JHL/mdf

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

August , 2011

TMI-2 PDMS Safety analysis Report Instruction Memorandum
UPDATE 9

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

Please update your Unit 2 PDMS SAR Update 8 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.

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Additional Instructions/comments

These replacement pages are the revised pages associated with update 9 of the PDMS SAR.
NOTE: Also included in this package are binder sleeves for Update9.

Signature _____ Ext. No _____ Date _____

TMI-2

POST-DEFUELING

MONITORED STORAGE

SAFETY ANALYSIS

REPORT

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1.3 MATERIAL REFERENCED (Cont'd)

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GPU Nuclear letter, C3 12-9 1-205 5, " SNM Accountability," transmitting the Reactor Coolant System PDSR, dated July 3, 199 1	3.1.2.52, 4.0, 4.3.3.3
GPU Nuclear letter, C3 12-91-2064, "SNM Accountability," transmitting the 'A' and 'B' Once-Through Steam Generators PDSR, Revision 1, dated July 3, 1991	3.1.2.52, 4.0, 4.3.3.3
GPU Nuclear letter, C3 12-93-2004, "SNM Accountability," transmitting the Reactor Vessel PDSR, dated February 1, 1993	1.1.2.1, 3.1.2.52, 4.0, 4.3.3.3
GPU Nuclear letter, C3 12-92-2080, "TMI-2 Reactor Vessel Criticality Safety Analysis," dated December 18, 1992	1.1.2.1, 3.1.2.52, 4.0, 4.3.1. 4.3.5
TMI Radiological Controls Department Procedure, **CY-TM-170-300**, "Offsite Dose Calculation Manual (ODCM)"	3.1.1.20,
TMI-2 Recovery Technical Specifications	1.1.2.1,
GPU Nuclear memorandum 66 15-92-0 160, from S. Acker to E. Schrull, "Dose Calculation Results per memo C3 12-92-1045, PDMS SAR Rev. 16," dated October 27, 1992	5.A.11, 8.2.5
GPU Nuclear memorandum 66 15 -92-0 162, from S. Acker to E. Schrull, "Additional Dose Calculations per memo C3 12-92-1045, PDMS SAR Rev. 16," dated October 30, 1992	8.2.5
GPU Nuclear memorandum 65 10-93-0077, from S. Acker to E. Schrull, "Dose Calculation Results per memo C3 12-93-1019, PDMS SAR Rev. 17," dated May 21, 1993	8.2.6

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Article 50.46 specifically exempts plants that have permanently ceased operations from the requirement for emergency core cooling systems for light water nuclear power reactors. 'This exemption applies to TMI-2 during PDMS. Thus, no exceptions to the provisions of this article are necessary.

3.1.1.35a 10 CFR 50.46a - Acceptance Criteria for Reactor Coolant Venting Systems

Article 50.46a establishes requirements for high point vents for the reactor coolant system. As TMI-2 is permanently shutdown and defueled with the reactor vessel head removed the requirements of this rule do not apply.

3.1.1.36 10 CFR 50.47 – Emergency Plans

Article 50.47 establishes requirements for the content and criteria for acceptance of emergency plans. Emergency planning requirements are based on the assumption of the potential necessity to notify the public of the existence of, or potential for significant off-site releases, Appendix E recognizes that emergency planning needs are different for facilities that present less risk to the public. Due to the non-operating and defueled status of TMI-2 during PDMS, there is no potential for any significant off-site radioactive release. Due to the existence of TMI-1 on the same site, emergency planning requirements for the site are dominated by TMI-1 . Therefore, the limited emergency planning necessary to accommodate the existence of TMI-2 on the same site as TMI-1 has been incorporated into one integrated emergency plan. The Plan encompasses both TMI-1 and TMI-2 and is under the authority of **Exelon Generation Company**, the TMI-1 License holder. See the discussion of paragraph 50.34(b)(6)(v).

3.1.1.37 10 CFR 50.48 - Fire Protection

Article 50.48 establishes fire protection requirements for plants that have permanently ceased operation. These requirements are applicable to TMI-2 during PDMS.

3.1.1.38 10 CFR 50.49 - Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants

Article 50.49 specifically exempts plants that have permanently ceased operations from the requirements to establish a program for the qualification of electrical equipment important to safety. This exemption applies to TMI-2 during PDMS. Thus, no exceptions are taken to the provisions of this article.

the requirements of 50.54 (a) **paragraphs (1), (2), (3), (4), 50.34 (b)(6)(ii)**, and Appendix B do not apply to TMI-2. However, the intent of **these articles** has been addressed by establishing a mainframe quality assurance program similar to that described in Appendix B for TMI-2 activities.

50.54(b) through 50.54(h)

Paragraphs 50.54(b) through 50.54(h) establish general limitations on licenses. No exceptions are taken to the provisions of these paragraphs.

50.54(b) through 50.54(h)

Paragraphs 50.54(i) through 50.54(m) establish requirements related to reactor operators and senior reactor operators. As discussed in License Amendment No. 30 (Reference 3.1 -3), these requirements are specified for fueled reactors. As the TMI-2 reactor has been defueled, the requirements of these paragraphs do not apply to TMI-2 during PDMS. Also see Section 3.1.1.20 regarding paragraph 50.34(b)(8).

50.54(b) through 50.54(h)

Paragraph 50.54(n) states that "The licensee shall not, except as authorized pursuant to a construction permit, make any alteration in the facility constituting a change from the technical specifications previously incorporated in a license or construction permit pursuant to Article 50.36 of this part." No exceptions are taken to the provisions of the article.

50.54(b) through 50.54(h)

Paragraph 50.54(0) specifically exempts the primary reactor containment of plants that have permanently ceased operation from the requirements of 10 CFR 50 Appendix J. This exemption applies to TMI-2 during PDMS. Thus, no exceptions to the provisions of this article are necessary.

50.54(b) through 50.54(h)

Paragraph 50.54(p) requires that a licensee prepare and maintain safeguard contingency plan procedures and provides for revisions to those procedures. The safeguards contingency provisions necessary for TMI-2 are provided by being located inside the same protected area as TMI-1 and are incorporated in the safeguards contingency plan for the TMI site. See Section 10.2.

50.54(q).

Paragraph 50.54(q) requires that a licensee shall follow and maintain emergency plans which meet the requirements of paragraph 50.47(b). This paragraph also defines requirements for revising those emergency plans. Due to the existence of TMI-l on the same site as TMI-2, emergency planning requirements for the site are dominated by TMI-I. Therefore, the limited emergency planning necessary to accommodate the existence of TMI-2 on the same site as TMI-1 has been incorporated into one integrated emergency plan . The Plan encompasses both TMI-1 and TMI-2 and is under the authority of **Exelon Generation Company**, the TMI-1 License holder.

50.54(r).

Paragraph 50.54(r) establishes requirements for test reactors. These requirements do not apply to TMI-2.

50.54(s).

Paragraph 50.54(s) requires each licensee who is authorized to possess and/or operate a nuclear power reactor to submit radiological emergency plans of state and local governmental entities to the NRC. All radiological emergency planning provisions necessary for TMI-2 have been incorporated in the TMI site emergency planning process, including the provisions of paragraph 50.54(s).

50.54(t).

Paragraph 50.54(t) establishes requirements for the development, revision, implementation and maintenance of the emergency preparedness program for nuclear power reactors. Emergency preparedness requirements applicable to TMI-2 are incorporated in the emergency preparedness program established for the TMI site. See Section 10.3.

50.54(u).

Paragraph 50.54(u) requires each licensee to submit emergency plans in accordance with 10 CFR 50.47(b) and Appendix E. Article 50.47 establishes requirements for the content and criteria for acceptance of emergency plans. Emergency planning requirements are based on the assumption of the potential necessity to notify the public of the existence of, or potential for significant off-site releases. Appendix E recognizes that emergency planning needs are different for facilities that present less risk to the public. Due to the non-operating and defueled status of TMI-2 during PDMS there is no potential for any significant off-site radioactive release and due to the existence of TM- I on the same site, emergency planning requirements for the site will be dominated by TMI-I. Therefore, the limited emergency planning necessary to accommodate the existence of TMI-2 on the same site as TMI-I has been incorporated into one integrated emergency plan. The Plan encompasses both TMI-1 and TMI-2 and **is** under the authority of **Exelon Generation Company**, the TMI-1 License holder. See Section 3.1.1.20 regarding paragraph 50.34(b)(6)(v).

50.54(v).

Paragraph 50.54(v) requires that each licensee shall ensure that physical security, safeguards contingency and guard qualification and training plans and other related safeguards information are protected against unauthorized disclosure in accordance with the requirements of 10 CFR 73.21 as appropriate. To the extent that TMI-2 possesses the above information during PDMS, it will be protected from unauthorized disclosure in accordance with 10 CFR 73.2 1. See paragraphs 50.34(c), 50.34(d) and 50.34(e).

3.1.2 GENERAL DESIGN CRITERIA

The Three Mile Island Nuclear Station Unit 2 was designed and constructed in accordance with the 70 general design criteria as listed in Appendix A of 10 CFR 50 dated July 11, 1967. A discussion of each criterion, demonstrating how the principal design features or design bases meet these criteria, is presented in Section 3.1.1 of the TMI-2 FSAR.

The general design criteria in Appendix A were revised by the AEC on July 15, 1971. The design and purchase of many Three Mile Island Unit 2 components were completed prior to the issuance of these revised general design criteria. These revised criteria, as they applied to the original design of the plant, are addressed in Section 3.1.2 of the TMI-2 FSAR.

During the PDMS period, fulfillment of many of the general design criteria in Appendix A of 10 CFR 50 are not necessary or appropriate; departure from the criteria are identified and justified herein. Other of the criteria are applicable only to a very limited degree. Criteria which address such requirements as containment, quality standards, and natural phenomena are examples of hose criteria which apply only to a limited degree during PDMS. Since the plant was originally designed and constructed in accordance with these criteria and since neither the accident nor activities during the recovery period significantly degraded the plant with respect to the capabilities required during PDMS, the facility, as it exists, is designed and constructed to standards which far exceed the requirements for PDMS. Each of the general design criteria in Appendix A of 10 CFR 50, as revised on January 1, 1987, and the necessary and appropriate degree of applicability during PDMS is discussed in the following sections.

3.1.2.1 Criterion 1 - Quality Standards and Records

Structures, systems, and components important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety function to be performed. Where generally recognized codes and standards are used, they shall be identified and evaluated to determine their applicability, adequacy, and sufficiency and shall be supplemented or modified as necessary to assure a quality product in keeping with the required safety function. A quality assurance program shall be established and implemented in order to provide adequate assurance that these structures, systems, and components will satisfactorily perform their safety functions. Appropriate records of the design, fabrication, erection, and testing of structures, systems, and components important to safety shall be maintained by or under the control of the nuclear power unit licensee throughout the life of the unit.

Discussion

Due to the unique condition of TMI-2 during PDMS, the specific requirements of Criterion 1 are not applicable; however, the intent of Criterion 1 has been addressed recognizing that the degree of quality assurance necessary to assure that the required capabilities are maintained during PDMS is far less extensive than that which was originally required for TMI-2. A quality assurance program has been established and will be maintained commensurate with the functional requirements of PDMS. The Quality Assurance Plan for PDMS is referenced in Section 10.1.

3.1.2.2 Criterion 2 - Design Bases for Protection against Natural Phenomena

Structures, systems, and components important to safety shall be designed to withstand the effect of natural phenomena, such as earthquakes, tornadoes, hurricanes, floods, tsunami, and seiches without loss of capability to perform their safety functions. The design bases for these structures, systems, and components shall reflect: (1) Appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area, with

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existence of modified penetrations, the Containment is capable of performing its intended function of contamination isolation throughout the range of normal and postulated unanticipated events.

The Containment will remain isolated during PDMS. The Containment Atmospheric Breather and the RB Purge isolation valves will close on a High RB pressure, if in operation.

7.1.2 AUXILIARY BUILDING

7.1.2.1 PDMS Function

The Auxiliary Building will serve primarily to support operation of the liquid radwaste, Auxiliary Building sump, ventilation, and effluent monitoring systems required for PDMS activities.

7.1.2.2 Facility Description

The Auxiliary Building shares a common wall with the Fuel Handling Building on the west side and has a vertical air intake shaft attached to the east wall. The Auxiliary Building is rectangular in plan with three main floors of slab-beam and flat slab construction. At the east exterior wall, a large door opening is located at grade level. This door opening is not protected from an aircraft impact loading or external missiles (see Section 3.5). The Auxiliary Building is accessible from the Service Building, the Fuel Handling Building, and the Unit 1 - Unit 2 corridor.

During PDMS, the Auxiliary Building Ventilation System and filters will be maintained in an operational condition and operated as required. The auxiliary sump, auxiliary sump tank, and associated level indication will remain operational as well as the 4801277 VAC power to lighting, and sump level indication circuits. Most loads of 480 VAC and above have been deenergized at the switchgear and/or motor control centers. However, selected loads (e.g., welding receptacles, heaters, pump motors, and fan motors) will remain energized and available for use, as needed. The Auxiliary Building will be accessible for periodic surveillance entries and other limited activities.

7.1.2.3 Evaluation

System operations and activities in the Auxiliary Building during PDMS are at a reduced level, thereby substantially reducing the potential for spread of contamination. Auxiliary Building sump and liquid radwaste systems are operational to collect and process any liquids in the building to minimize uncontrolled accumulation of liquids during PDMS.

7.1.3 FUEL HANDLING BUILDING

7.1.3.1 PDMS Function

During PDMS, the Fuel Handling Building is not required for storage of new or spent fuel. However, it may be utilized for the temporary staging of site-generated radwaste or other appropriate uses. **The Model Room in the fuel handling building is used for TMI-1 storage and for time critical activities (i.e., access to the SBO diesel, security events, fire related incidents).**

7.1.3.2 Facility Description

The Fuel Handling Building shares a common wall on the east side with the Auxiliary Building and a common truck bay with the Unit 1 Fuel Handling Building on the north end. One bridge crane, common

to both buildings, was provided for fuel handling no separating wall exists above the operating floor, i.e., elevation 347'-6". The Containment is located on the south side of this building Two stainless steel lined, reinforced concrete fuel storage pools are located in the building.

During PDMS, the Fuel Handling Building Ventilation System and filters will be maintained in an operational condition and will be operated as required for elevations below 347'-6". The operating floor (el. 347'-6") area is ventilated by the TMI-1 ventilation system.

Electric distribution will remain configured to power low voltage (120/208 VAC) lighting loads and fire detectors.

All fuel canisters have been removed from the spent fuel pools and shipped off-site. Both he1 pool structures will remain intact. The SDS has been deactivated. The Fuel Transfer Tubes have been isolated. Access to the fuel pool area from TMI-2 will be appropriately controlled to prevent unauthorized access to the TMI-1 fuel pool area which is classified as a vital area of TMI-1. The FHB truck bay will be accessible from and under operational control of TMI-1.

7.1.5.3 Evaluation

The Fuel Handling Building configuration for PDMS minimizes sources of contamination; therefore, the potential for spread of contamination is very low.

Current use of the Model Room for time critical activities does not increase the potential for the spread of contamination.

7.1.4 FLOOD PROTECTION

7.1.4.1 PDMS Function

The existing unit flood protection capabilities will be maintained for PDMS and are based on a maximum water elevation of 311 ft. under flood conditions. The probable maximum flood (PMF) for the Susquehanna River at Harrisburg was established by the Army Corps of Engineers as 1.600,000 cfs. The water surface profiles routed downstream to the site results in a PMF of 1,625,000 cfs, which corresponds to a site elevation of 308.7 ft. The water surface elevation at the tip of Three Mile Island is 304 ft. and 303 ft. at the intake structure for the design flood. At these locations for the PMF, the calculated surface elevations are 310 ft. and 309 ft., respectively. See Section 2.4.3.

7.1.4.2 Facility Description

Although station grade, at 304 ft., is above the water surface profile, dikes are provided around the site to protect the station from wave action for the design flood. The top elevation of the protective dike at the tip of Three Mile Island is 3 10 ft., which provides a freeboard of

d. Control Building Ventilation

e. Service Building Ventilation

f. Control Building Area Ventilation

The Air Intake Tunnel protects these plant ventilating systems from air borne debris, flood water, and fire.

7.1.5.2 Facility Description

The Air Intake Tunnel consists of a cylindrical intake tower with screens aid baffles, a 100,000 gallon sump, and an underground tunnel leading to the plant ventilating systems. The tunnel floor drains to the sump. The tunnel leads to a vertical air intake shaft which branches out into the individual supply' ducts for the plant ventilating systems. The sump will be pumped out via a temporary pump, when required.

7.1 3.3 Evaluation

The Air Intake Tunnel is maintained during PDMS to provide an air supply pathway for operational plant ventilating systems. The structure is designed to protect the AE Intake System against projectiles and flooding. The openings in the tower are above the probable maximum flood level; and the baffled intake and screen prevent projectiles from entering the intake.

The Air Intake Tunnel, by design, also helps prevent the spread of fire into plant ventilating systems.

7.1.6 UNIT 1/UNIT 2 CORRIDOR

7.1.6.1 PDMS Function

During PDMS, the Unit 1/Unit 2 corridor serves as an operational facility to provide:

a. Heated weather enclosure for various operational system piping such as domestic water, Unit 1 discharge to IWTS and the Unit 1 Processed Water Storage Transfer System.

b. Access to the Auxiliary Building from the east outside yard through rollup security door 10.

c. Interconnecting corridor between Unit 1 and Unit 2.

7.1.6.2 Facility Description

The Unit 1/Unit 2 corridor is a heated passageway running north to south adjacent to the east side of the Turbine, Service and Control, and Auxiliary Buildings. It is a steel frame structure with metal siding over a concrete base floor, with a partial block wall up to the windows to the outside east yard. The roof has a rubber coating.

7.2.5.2 Normal and Emergency Lighting

7.2.5.2.1 PDMS Function

TMI Unit 2 is provided with normal lighting systems using mercury-vapor, metal halide, fluorescent and incandescent luminaries. These systems provide illumination for PDMS support activities and for personnel safety. All lighting not required for security and monitoring activities will be turned off. Lighting will be energized as needed for maintenance activities.

Installed emergency lighting will be maintained during PDMS. One-half of the normal lighting originally designed and installed is available throughout TMI-2 except in the RB. Normal lighting within the RB is provided by strings of lights installed on the 305' and 347' elevations. The lighting is adequate to support PDMS inspection and test activities without additional illumination from permanently installed building lighting. Eight-hour portable emergency lighting will be carried by emergency personnel crews entering the buildings. This lighting will be staged with emergency response crew equipment. Routine entry crews will carry flashlights.

7.2.5.2.2 System Description

The PDMS lighting system is powered from normal AC power sources: an exception to this is the RB lighting system discussed below. This system utilizes three types of luminaries: mercury-vapor, fluorescent and incandescent. The mercury-vapor and metal halide luminaries are powered from 480/277-volt systems directly from the 480-volt unit substations or from 480-volt motor control centers. The fluorescent and incandescent luminaries are powered from 208/120-volt systems utilizing 30 KVA step-down transformers which are supplied from the 480-volt sources. In general, the mercury-vapor luminaries are used in high ceiling areas, the fluorescent luminaries in almost all other areas, and the incandescent luminaries where environmental conditions require their use. Exit signs are powered from receptacle power with rechargeable internal batteries for backup.

Emergency lighting consists of lamps powered by batteries which initiate operation upon loss of the normal lighting system. This lighting is provided to ensure safe egress for personnel. Additional exit information will be provided by postings.

The RB normal lighting system consists of lights on the 305' and 347' elevations fed from Portable Power Distribution Centers (PPDC) or "power buggies " These power supplies were originally installed in the RB to support defueling activities. Two power buggies are located on the 305' elevation and two are located on the 347' elevation. The power feed is from either USS 2-35 or USS 2-45 and is configured such that the two power buggies on each elevation are energized from different sources, i.e., on each elevation, one-half of the lighting is fed from one source and the other half is fed from the other source. In the event one source of power is lost during an entry, adequate lighting would remain to assist in the safe evacuation of personnel.

7.2.6.10.3 Evaluation

During PDMS, Service Building ventilation and air handling equipment provide a filtered pathway during system operation to meet industrial and radiological requirements. This system is maintained operational for personnel ingress and egress to the Reactor Building, Auxiliary Building, and Unit 2 Control Room, for maintenance and surveillance entries into the Service Building, and provides ventilation for the Compressed Air System compressors.

7.2.6.11 PDMS Alarm Monitoring System

7.2.6.11.1 PDMS Function

The function of the plant computer alarm system is to notify plant operations personnel of an abnormal plant condition which requires operator action to correct or which represents a threat to plant, personnel or equipment safety. The PDMS Alarm Monitoring System provides the means to remotely monitor select TMI-2 alarms and TMI-2 station vent monitor signals in the TMI-1 Control Room via the TMI-1 plant computer. As required by the TMI Emergency Plan, the PDMS Alarm Monitoring System is designed such that if the remote monitoring of the alarms in Unit 1 becomes inoperable, the TMI-2 Control Room alarms and station vent monitor signals can be monitored from the annunciators and other recorders/equipment in the TMI-2 Control Room. The alarms and functions to be monitored are listed in Operating Procedure **OP-2TM-2602-401, Response to PDMS PPC Alarms**. (Ref. 7.3-13).

7.2.6.11.2 System Description

The plant computer uses four types of alarm information display systems - alarm CRTs, alarm displays on a Utility CRT, alarm summaries on a Utility CRT and an alarm printer. The modifications that were necessary to facilitate installation/operation of the PDMS Alarm Monitoring System were as follows:

1 A fiber optics cable link was installed between the TMI-1 computer system in the OSF Building and the TMI-2 multiplexer unit located in the TMI-2 Control Room.

2. A multiplexer unit was installed in the Unit 2 Control Room to interface with all required signals from the field (i.e., sensors or annunciators) or the Unit 2 Control Room annunciators. The multiplexer performs the necessary signal processing to convert the digital and analog signals to a light signal which is transmitted back to the TMI-1 computer via the fiber optics cable link.

3. The required digital alarm inputs and analog signals were interconnected to the multiplexer unit.

4. The multiplexer receives 120VAC power from a 480/120VAC regulated transformer. This transformer receives 480VAC power from one of two sources. Normally it will be fed from the TMI-2 480VAC system or, as a backup, it can be fed from one of TMI-1's 480VAC B.O.P. power systems.

5. A Mini-Uninterruptible Power Supply (UPS) provides backup power to the multiplexer in

TABLE 7.2-2
CONTAINMENT ISOLATION TABLE

Penetration	Service	System	Operational System	Line Size (inches)	Isolation Valves	Status
R-524	Fuel Transfer Canal Fill Line	SF	NO	10	SF-V105	Manual-Locked Closed (L.C.)
R-525	Decay Heat Coolant Letdown	DH	NO	12 1/2	DH-V3 DH-V225	De-energized Manual-L.C
R-526	Steam Generator "A" Sample Line	CA	NO	1/2	CA-V8	De-energized-L.C.
R-527	Core Flood Tank Bleed & Sample	CF	NO	1	CF-V144	De-energized-L.C.
R-528	Steam Generator "B" Sample Line	CA	NO	1/2	CA-V9	De-energized-L.C.
R-529	Reactor Coolant Drain Pump Discharge	WDL	NO	4	**WDL-V1125**	De-energized-L.C.
R-530	Steam Generator Side Vent & Drain	SV	NO	2	SV-V55	De-energized-L.C.
R-531	Decay Heat CCW for RC Leak Recovery	DC	NO	8	DC-V115	De-energized-L.C.
R-532	Fuel Transfer Tube	FH	NO	1 39	FH-V1D Blind Flange	Manual-L.C Installed

7.3 REFERENCES

Provided below is a list of reference documents that provide further information. Relevant additional information can be found in these documents (e.g.; drawings, numbers, procedure numbers, etc).

NOTE: Documents designated as "Historical" are for information only and will no longer be updated.

REF	DOCUMENT #	TITLE
7.3-1	OPM Section R-4 **(Historical)**	Unit-2 PDMS Ventilation System
7.3-2	OPM Section R-3 **(Historical)**	Unit-2 Sump Pump and Discharge System
7.3-3	OPM Section R-9 **(Historical)**	PDMS Compressed Air Supply System
7.3-4	OPM Section R-6 **(Historical)**	PDMS Electrical
7.3-5	OPM Section M-6 **(Historical)**	Flood Protection
7.3-6	OPM Section M-8 **(Historical)**	Plant Communications System Systems
7.3-7	OPM Section R-1 **(Historical)**	PDMS Alarm Monitoring
7.3-8	OPM Section R-8 **(Historical)**	Radiation Monitoring in PDMS
7.3-9	OPM Section R-5 **(Historical)**	Reactor Building Ventilation/Breather
7.3-10	OPM Section R-2 **(Historical)**	Unit-2 Liquid Radwaste Disposal in PDMS
7.3-11	OPM Section R-10 **(Historical)**	PDMS Miscellaneous
7.3-12	GPU Nuclear Letter, LL2-8 1-019 1	"Design Pressure for Containment and Future Mechanical And Electrical Penetration Modifications," dated December 04, 198 1
7.3-13	**TMI Procedure OP-2TM-2602-401**	**" Response to PDMS PPC Alarms (SAR 7.2.6.11)"**
7.3-14	GPU Nuclear SDD T2-680A,	"TMI-2 Heat Sensitive Wire Fire Detection System"

10.3 EMERGENCY PLAN

10 CFR50.47 establishes requirements for the content and criteria for acceptance of emergency plans. Emergency planning requirements are based on the assumption of the potential necessity to notify the public of the existence of, or potential for significant off-site releases. 10 CFR 50 Appendix E recognizes that emergency planning needs are different for facilities that present less risk to the public. Due to the non-operating and defueled status of TMI-2 during PDMS, there is no potential for any significant off-site radioactive releases and, due to the existence of TMI-1 on the same site, emergency planning requirements for the site are dominated by TMI-1. Therefore, the limited emergency planning necessary to accommodate the existence of TMI-2 on the same site as TMI-1 has been incorporated into one integrated emergency plan. There exists only one Emergency Preparedness for the TMI station. The Plan encompasses both TMI-1 and TMI-2and is under the authority of Exelon Generation Company, the TMI-1 License holder.

The emergency plan for TMI site incorporates all of the essential emergency planning requirements established by 10 CFR 50 Appendix E and other regulatory guidance. Since there are no events associated with TMI-2which could result in a release approaching the levels established in the Protection Action Guide, the site emergency action levels are based on events which could occur at TMI-1. The site emergency facilities, such as the **Unit 1 Main Control Room**, the Technical Support Center, and the Operations Support Center are located in or in convenient proximity to TMI-1. **All site personnel are trained and drilled to respond to site events in accordance with the TMI Emergency Plan**.

10.5.1. **Chief Nuclear Officer**

The Chief Nuclear Officer is responsible to the FirstEnergy Nuclear Committee of the Board to provide highest level direction on all activities associated with the safe and efficient management and oversight of all TMI-2 activities.

10.5.1.1 **President**

President is responsible to the Chief Nuclear Officer for top level direction on all activities associated with the safe and efficient management and oversight of all TMI-2 activities. This position serves as the GPU Nuclear Cognizant Officer. This position may be combined with the Chief Nuclear 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.

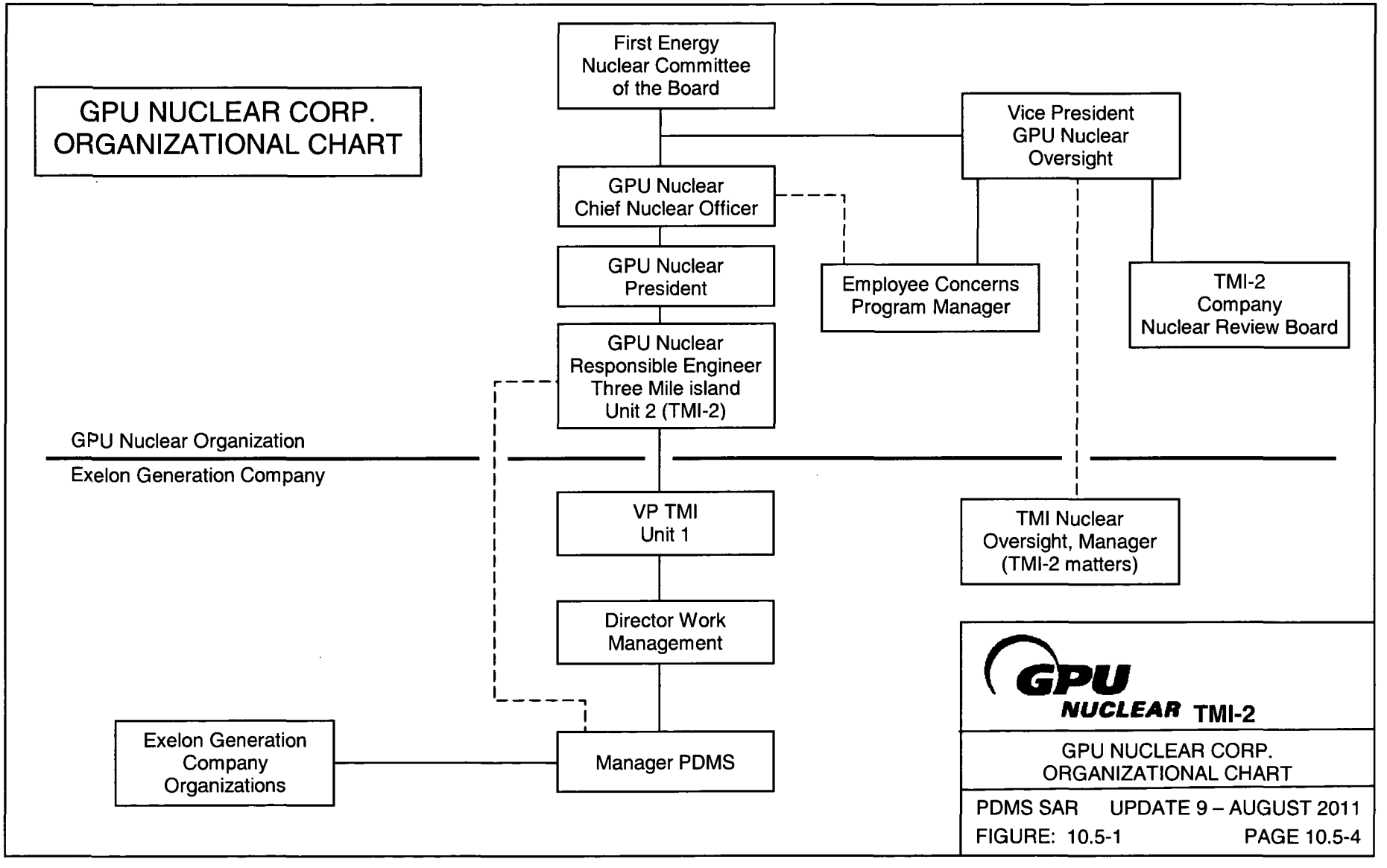
10.5.4 Employee concerns Program

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

The Vice-President, GPU Nuclear Oversight, 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. The Vice-President, GPU Nuclear Oversight is empowered to investigate such matters, identify any needed actions, and seek its resolution. The Vice-President, GPU Nuclear Oversight 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


GPU NUCLEAR CORP.
ORGANIZATIONAL CHART
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Nuclear Committee
of the Board
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GPU Nuclear
Oversight
GPU Nuclear
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GPU Nuclear
President
Employee Concerns
Program Manager
TMI-2
Company
Nuclear Review Board
GPU Nuclear
Responsible Engineer
Three Mile island
Unit 2 (TMI-2)
GPU Nuclear Organization
Exelon Generation Company
VP TMI
Unit 1
TMI Nuclear
Oversight, Manager
(TMI-2 matters)
Director Work
Management
Exelon Generation
Company
Organizations
Manager PDMS
GPU NUCLEAR TMI-2
GPU NUCLEAR CORP.
ORGANIZATIONAL CHART
PDMS SAR UPDATE 9 – AUGUST 2011
FIGURE: 10.5-1 PAGE 10.5-4