

5928-04-20162
October 20, 2004

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Three Mile Island Nuclear Station, Unit 1
Facility Operating License No. DPR-50
NRC Docket No. 50-289

Subject: Technical Specification Change Request No. 326 – Elimination of Containment
Equipment Hatch Closure During Refueling

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," AmerGen Energy Company, LLC (AmerGen) is requesting an amendment to Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI Unit 1). The proposed amendment would eliminate the containment equipment hatch closure requirement during fuel loading and refueling operations. The basis for this change is the previously reviewed and approved limiting design basis analysis of the TMI Unit 1 Fuel Handling Accident Inside the Reactor Building using an Alternative Source Term in accordance with 10 CFR 50.67 and Regulatory Guide 1.183, as documented in NRC License Amendment No. 236, dated October 2, 2001.

The proposed amendment has been reviewed by the TMI Unit 1 Plant Operations Review Committee and approved by the Nuclear Safety Review Board in accordance with the requirements of the AmerGen Quality Assurance Program.

Using the standards in 10 CFR 50.92, AmerGen has concluded that this proposed change does not constitute a significant hazards consideration, as described in the enclosed analysis performed in accordance with 10 CFR 50.91(a)(1). Pursuant to 10 CFR 50.91(b)(1), a copy of this Technical Specification Change Request is being provided to the designated officials of the Commonwealth of Pennsylvania, as well as the chief executives of the township and county in which the facility is located.

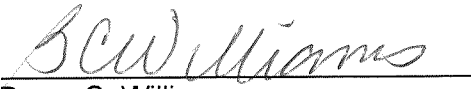
We request approval of the proposed amendment by October 20, 2005, to support the TMI Unit 1 T1R16 refueling outage activities currently scheduled to commence on October 25, 2005. Once approved, the amendment shall be implemented within 30 days.

New regulatory commitments established by this submittal are identified in Enclosure 3. If any additional information is needed, please contact David J. Distel at (610) 765-5517.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Executed on 10/20/04


Bruce C. Williams
Vice President, TMI Unit 1
AmerGen Energy Company, LLC

Enclosures:

- 1) TMI Unit 1 Technical Specification Change Request No. 326 Evaluation of Proposed Changes
- 2) TMI Unit 1 Technical Specification Change Request No. 326 Markup of Proposed Technical Specification Page Changes
- 3) List of Commitments

cc: S. J. Collins, Administrator, USNRC Region I
D. M. Kern, USNRC Senior Resident Inspector, TMI Unit 1
T. G. Colburn, USNRC Senior Project Manager (Acting), TMI Unit 1
D. Allard, Director, Bureau of Radiation Protection-PA Department of Environmental Resources
Chairman, Board of County Commissioners of Dauphin County
Chairman, Board of Supervisors of Londonderry Township
TMI Unit 1 File No. 04092

ENCLOSURE 1

TMI Unit 1 Technical Specification Change Request No. 326

Evaluation of Proposed Changes

1.0 DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," AmerGen Energy Company, LLC (AmerGen) is requesting an amendment to Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI Unit 1). The proposed amendment would eliminate the existing Technical Specification 3.8.6 requirement to maintain the containment equipment hatch cover in place with a minimum of four bolts during fuel loading and refueling operations.

AmerGen requests that the following changed replacement pages be inserted into the existing Technical Specifications:

Revised TMI Unit 1 Technical Specification Pages: 3-44, 3-45, and 3-45a.

The marked up pages showing the requested changes are provided in Enclosure 2.

2.0 PROPOSED CHANGES

2.1 Three Mile Island Nuclear Station, Unit 1 Facility Operating License No. DPR-50

2.1.1 Technical Specification 3.8.6 is revised to delete the requirement that the containment equipment hatch cover remain in place with a minimum of four bolts securing the cover to the sealing surfaces during fuel loading and refueling operations. The requirement that the containment equipment hatch opening be capable of being closed during handling of irradiated fuel in the Reactor Building is being substituted for the deleted requirement. The containment equipment hatch opening is also added to the existing Technical Specification page 3-44 footnote requiring administrative controls to ensure containment openings and penetrations are capable of being closed in the event of a fuel handling accident inside the Reactor Building. The Technical Specification 3.8 Bases are revised to reflect this proposed change, and also to clarify that the requirements of Technical Specification 3.8.9 for testing of the Reactor Building purge isolation system ensures that monitors, purge valves, and associated interlocks will be functional during operations when containment integrity is to be maintained.

3.0 BACKGROUND

The current TMI Unit 1 licensing basis accident analysis incorporates the dose consequences from the postulated design basis Maximum Hypothetical Accident/LOCA and the Fuel Handling Accident Inside the Reactor Building using the Alternative Radiological Source Term (AST) methodology. The full scope implementation of the AST methodology for TMI Unit 1 was approved by the NRC in Amendment No. 235, dated September 19, 2001. Application of the AST methodology to the TMI Unit 1 Fuel Handling Accident Inside the Reactor Building was approved separately by the NRC in Amendment No. 236, dated October 2, 2001. TMI Unit 1 Updated Final Safety Analysis

Report (UFSAR) Section 14.2.2.1, "Fuel Handling Accident," describes the design basis accident analysis methodology, assumptions and results using the AST methodology.

The existing licensing basis analysis for the Fuel Handling Accident Inside the Reactor Building demonstrated that the dose consequences remain below the limits specified in 10 CFR 50.67 and Regulatory Guide 1.183 assuming no credit for containment integrity and no credit for Reactor Building Purge Air Treatment System exhaust filtration prior to containment atmosphere release to the environment.

TMI Unit 1 Technical Specification Amendment No. 236, dated October 2, 2001, removed the closure requirements during fuel loading and refueling operations for the containment air lock doors and other penetrations, and established the requirement that these openings shall be capable of being closed in the event of a fuel handling accident inside the Reactor Building. This amendment also established administrative control requirements for monitoring these openings and providing assurance that the openings are capable of being closed following evacuation of the containment. As part of Amendment No. 236, TMI Unit 1 committed to establish administrative controls requiring that qualified personnel be designated, required tools or equipment be identified and staged, and required guidance be provided to ensure that containment closure is achieved within 45 minutes following evacuation of the containment. The containment equipment hatch opening was not included in the scope of Amendment No. 236 because the permanent hatch cover would not have been capable of being closed within 45 minutes due to the physical size and weight of the cover. The capability to close the hatch opening within 45 minutes will be provided by use of a contingency temporary cover when the permanent equipment hatch cover is fully removed, or by use of the permanent equipment hatch cover if it can be moved into place within 45 minutes. TMI Unit 1 plans to procure a temporary hatch cover to be utilized during fuel loading and refueling operations to close the containment equipment hatch opening in the event of a fuel handling accident inside the Reactor Building. The contingency temporary cover will be capable of being closed within 45 minutes, similar to the administrative requirement for the containment air lock and other penetrations approved in Amendment No. 236. This cover is planned to be utilized in the upcoming TMI Unit 1 T1R16 refueling outage (Fall 2005).

The use of a contingency temporary hatch cover is consistent with the approach utilized by Crystal River-3 (CR-3) in an amendment application dated October 11, 2002, and approved by NRC in Amendment No. 208, dated July 14, 2003 for CR-3. The CR-3 Amendment No. 208 implements the Nuclear Energy Institute (NEI) Technical Specification Task Force (TSTF) change traveler TSTF-51, Revision 2. The TMI Unit 1 proposed change does not implement TSTF-51, Revision 2. However, the TMI Unit 1 proposed change is consistent with the technical basis for the TSTF-51, Revision 2, since the TMI Unit 1 Technical Specification currently prohibits irradiated fuel from being removed from the reactor until the unit has been subcritical for at least 72 hours, and the proposed change commits to monitor the hatch opening, provide a contingency method to close the hatch opening, and to operate the Reactor Building Purge Exhaust System whenever irradiated fuel movement is in progress and containment integrity is not maintained.

The Technical Specification 3.8 Bases are revised to describe the basis for use of the temporary equipment hatch cover during fuel loading and refueling operations, and to

recognize that the unbolted equipment hatch when rolled into place is an acceptable method of covering the hatch opening.

4.0 TECHNICAL ANALYSIS

As described in TMI Unit 1 UFSAR Section 14.2.2.1, "Fuel Handling Accident," the existing licensing basis accident analysis for the fuel handling accident inside the Reactor Building during fuel loading and refueling operations demonstrates that the dose consequences remain well within the allowable dose criteria as specified in Regulatory Guide 1.183 and 10 CFR 50.67 for the control room, exclusion area boundary, and low population zone. This current licensing basis analysis utilizes Alternative Source Term methodology in accordance with Regulatory Guide 1.183 and was previously reviewed and approved by NRC in TMI Unit 1 Amendment No. 236, dated October 2, 2001. This analysis assumes no credit for containment integrity in terms of containment equipment hatch closure, containment isolation, personnel and emergency air lock closure, or Reactor Building Purge Exhaust filtration prior to release to the environment. All activity is assumed to be released to the environment within 2 hours. The accident is assumed to happen after the reactor has been shut down for 72 hours. TMI Unit 1 Technical Specification 3.8.10 prohibits removing irradiated fuel from the reactor until the unit has been subcritical for at least 72 hours. Therefore, the proposed change is bounded by the existing licensing basis analysis for the TMI Unit 1 Fuel Handling Accident Inside the Reactor Building.

The previously approved control room dose consequence analysis, which bounds the proposed change, incorporates the licensing basis analysis assumption for control room envelope unfiltered inleakage of 1,000 cfm. This value was based on tracer gas testing performed in accordance with ASTM E741, as described in the NRC Safety Evaluation Report for Amendment No. 236, dated October 2, 2001. Therefore, the proposed change adequately addresses the unfiltered inleakage issue described in NRC Generic Letter 2003-01, "Control Room Habitability," dated June 12, 2003.

The proposed change applies the existing Technical Specification 3.8.6 administrative controls to ensure monitoring of containment equipment and personnel hatch openings during fuel handling activities and enable closure of these openings in the event of a fuel handling accident. Plant procedures will require the placement of continuously operated particulate and radioiodine air sampling equipment inboard of the open containment equipment hatch opening during fuel loading and refueling activities. Plant procedures will require operation of the Reactor Building Purge Exhaust System and bypassing of the Reactor Building Purge High Radiation Isolation signal whenever irradiated fuel movement is in progress and containment integrity is not maintained. Operation of the Reactor Building Purge Exhaust System is a contingency action, which will decrease doses even further by drawing any release from a postulated fuel handling accident in the proper direction such that it can be treated and monitored.

TMI Unit 1 plans to procure for use in the T1R16 refueling outage (Fall 2005), and future outages, a contingency temporary equipment hatch cover that will be staged and capable of being installed, in the event of a fuel handling accident inside containment, within 45 minutes following an evacuation of the containment, if the containment equipment hatch opening is not already closed or in the process of being closed. The

contingency temporary hatch cover provides an atmospheric ventilation barrier to enable ventilation systems to draw the release from a postulated fuel handling accident in the proper direction such that it can be treated and monitored. The temporary equipment hatch cover is not intended to completely block the opening or be capable of resisting pressure. Therefore, the proposed change is consistent with the administrative controls applied to other previously approved containment openings.

Although no accident analysis credit is taken for the Reactor Building Purge Air Treatment System exhaust filtration prior to release to the environment, the Reactor Building Purge Air Treatment System filters and charcoal adsorber banks are maintained in accordance with the TMI Preventive Maintenance Program and are therefore available to decrease doses even further and monitor any such release.

Existing Technical Specification 3.8.9 requirements for testing of the Reactor Building purge isolation system are maintained since this testing will continue to ensure that monitors, purge valves, and associated interlocks will be functional during operations when containment integrity is to be maintained.

The containment closure requirement in response to a loss of decay heat removal is not affected by the proposed change.

Based on the above, the proposed change to eliminate the Technical Specification requirement to maintain containment equipment hatch closure during fuel loading and refueling operations will not adversely affect nuclear safety or safe plant operations.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

AmerGen has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change is only related to a postulated fuel handling accident inside the Reactor Building occurring during fuel loading and refueling activities. The proposed change does not increase the probability of a fuel handling accident in that the proposed change deals with the results of such an accident, not the cause of such an accident. The proposed change does not increase the consequences of an accident previously evaluated in that the TMI Unit 1 Alternative Source Term has been previously reviewed and approved by the NRC, and this proposed change is consistent with the assumptions of this previous analysis. The Alternative Source Term analysis for the Fuel Handling Accident Inside the Reactor Building takes no credit for closure of the containment equipment hatch opening or for a filtered release. Previous

analyses of external events were reviewed and the proposed changes do not affect the conclusions of these analyses. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change does not affect nor create a different type of fuel handling accident. The proposed change is consistent with the existing licensing basis accident analysis for a postulated fuel handling accident inside containment during fuel loading and refueling operations. The proposed change does not involve any structure, system, or component relied upon to mitigate any design basis accident. The revised operations are consistent with the fuel handling accident analysis. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

Previously approved analysis demonstrates that the resultant dose consequences are well within the appropriate acceptance criteria. The proposed change is bounded by the previously approved analysis, and thus the margin of safety, as defined by 10 CFR 50.67 and Regulatory Guide 1.183, is maintained. Maintaining the capability to close the containment equipment hatch opening following an evacuation of the containment would further reduce the dose consequences in the event of a fuel handling accident inside containment and provides additional margin to the calculated doses. Therefore, the proposed change does not involve a significant reduction in any margin of safety.

Based on the above, AmerGen concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

AmerGen has determined that the proposed change does not require any exemptions or relief from regulatory requirements and does not affect conformance with any General Design Criteria.

The proposed change is bounded by the current licensing basis accident analysis for TMI Unit 1. This accident analysis utilizes the Alternative Source Term methodology in accordance with 10 CFR 50.67 and Regulatory Guide 1.183, and has been previously

reviewed and approved by the NRC for TMI Unit 1. The commitment to ensure that the containment equipment hatch opening is capable of being closed in the event of a fuel handling accident inside the Reactor Building is consistent with defense-in-depth provisions previously approved by the NRC for other containment penetrations and openings for TMI Unit 1.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

Precedence exists for the proposed change and the use of a temporary hatch cover to provide closure of the containment equipment hatch opening in the event of a fuel handling accident inside the Reactor Building. The proposed change is consistent with the approach utilized by Crystal River-3 (CR-3) in amendment application dated October 11, 2002, and approved by NRC in Amendment No. 208, dated July 14, 2003 for CR-3.

1. TMI Unit 1 License Amendment No. 235, dated September 19, 2001
2. TMI Unit 1 Technical Specification Amendment No. 236, dated October 2, 2001

ENCLOSURE 2

**TMI Unit 1 Technical Specification Change Request No. 326 Markup of
Proposed Technical Specification Page Changes**

Revised Technical Specification Pages

3-44

3-45

3-45a

3.8 FUEL LOADING AND REFUELING

Applicability: Applies to fuel loading and refueling operations.

Objective: To assure that fuel loading and refueling operations are performed in a responsible manner.

Specification

- 3.8.1 Radiation levels in the Reactor Building refueling area shall be monitored by RM-G6 and RM-G7. Radiation levels in the spent fuel storage area shall be monitored by RM-G9. If any of these instruments become inoperable, portable survey instrumentation, having the appropriate ranges and sensitivity to fully protect individuals involved in refueling operation, shall be used until the permanent instrumentation is returned to service.
- 3.8.2 Core subcritical neutron flux shall be continuously monitored by at least two neutron flux monitors, each with continuous indication available, whenever core geometry is being changed. When core geometry is not being changed, at least one neutron flux monitor shall be in service.
- 3.8.3 At least one decay heat removal pump and cooler shall be operable.
- 3.8.4 During reactor vessel head removal and while loading and unloading fuel from the reactor, the boron concentration shall be maintained at not less than that required for refueling shutdown.
- 3.8.5 Direct communications between the control room and the refueling personnel in the Reactor Building shall exist whenever changes in core geometry are taking place
- 3.8.6 During the handling of irradiated fuel in the Reactor Building, at least one door in each of the personnel and emergency air locks shall be capable of being closed.* ~~The equipment hatch cover shall be in place with a minimum of four bolts securing the cover to the sealing surfaces.~~
- 3.8.7 During the handling of irradiated fuel in the Reactor Building, each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
 1. Closed by an isolation valve, blind flange, manual valve, or equivalent, or capable of being closed,* or
 2. Be capable of being closed by an operable automatic containment purge and exhaust isolation valve.

the equipment hatch opening and

the equipment hatch opening,

*Administrative controls shall ensure that appropriate personnel are aware that air lock doors and/or other penetrations are open, a specific individual(s) is designated and available to close the air lock doors and other penetrations as part of a required evacuation of containment. Any obstruction(s) (e.g., cable and hoses) that could prevent closure of an air lock door or other penetration will be capable of being quickly removed.

the equipment hatch opening,

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- 3.8.8 If any of the above specified limiting conditions for fuel loading and refueling are not met, movement of fuel into the reactor core shall cease; action shall be initiated to correct the conditions so that the specified limits are met, and no operations which may increase the reactivity of the core shall be made.
- 3.8.9 The reactor building purge isolation valves, and associated radiation monitors which initiate purge isolation, shall be tested and verified to be operable no more than 7 days prior to initial fuel movement in the reactor building.
- 3.8.10 Irradiated fuel shall not be removed from the reactor until the unit has been subcritical for at least 72 hours.
- 3.8.11 During the handling of irradiated fuel in the Reactor Building at least 23 feet of water shall be maintained above the level of the reactor pressure vessel flange, as determined by a shiftly check and a daily verification. If the water level is less than 23 feet above the reactor pressure vessel flange, place the fuel assembly(s) being handled into a safe position, then cease fuel handling until the water level has been restored to 23 feet or greater above the reactor pressure vessel flange.

Bases

Detailed written procedures will be available for use by refueling personnel. These procedures, the above specifications, and the design of the fuel handling equipment as described in Section 9.7 of the UFSAR incorporating built-in interlocks and safety features, provide assurance that no incident could occur during the refueling operations that would result in a hazard to public health and safety. If no change is being made in core geometry, one flux monitor is sufficient. This permits maintenance on the instrumentation. Continuous monitoring of radiation levels and neutron flux provides immediate indication of an unsafe condition. The decay heat removal pump is used to maintain a uniform boron concentration. The shutdown margin indicated in Specification 3.8.4 will keep the core subcritical, even with all control rods withdrawn from the core (Reference 1). The boron concentration will be sufficient to maintain the core $k_{\text{eff}} \leq 0.99$ if all the control rods were removed from the core, however only a few control rods will be removed at any one time during fuel shuffling and replacement. The k_{eff} with all rods in the core and with refueling boron concentration is approximately 0.9. Specification 3.8.5 allows the control room operator to inform the reactor building personnel of any impending unsafe condition detected from the main control board indicators during fuel movement.

Per Specification 3.8.6 and 3.8.7, the personnel and emergency air lock doors, and penetrations may be open during movement of irradiated fuel in the containment provided ^{equipment hatch opening,} a minimum of one door in each of the air locks, and penetrations are capable of being closed in the event of a fuel handling accident, and the plant is in REFUELING SHUTDOWN or REFUELING OPERATION with at least 23 feet of water ^{the equipment hatch opening,} above the fuel seated within the reactor pressure vessel. ^{INSERT A} The minimum water level specified is the basis for the accident analysis assumption of a decontamination factor of 200 for the release to the containment atmosphere from the postulated damaged fuel rods located on top of the fuel core seated in the reactor vessel. Should a fuel handling accident occur inside containment, a minimum of one door in each personnel and emergency air lock, and the open penetrations will be closed following an evacuation of containment. Administrative controls will be in place to assure closure of at least one door in each air lock, as well as other open ^{within 45 minutes} containment penetrations, following a containment evacuation.

^R → ^{INSERT B} Provisions for equivalent isolation methods in Technical Specification 3.8.7 include use of a material (e.g. temporary sealant) that can provide a temporary, atmospheric pressure ventilation barrier for other containment penetrations during fuel movements.

closure of the equipment hatch using a temporary hatch cover or the permanent hatch will be capable of being rolled into place with at least one air lock door capable of being closed,

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when containment integrity is to be maintained.

Specification 3.8.9 requires testing of the reactor building purge isolation system. This system consists of the four reactor building purge valves and the associated reactor building purge radiation monitor(s). The test verifies that the purge valves will automatically close when they receive initiation signals from the radiation detectors that monitor reactor building purge exhaust. The test is performed no more than 7 days prior to the start of fuel movement in the reactor building to ensure that the monitors, purge valves, and associated interlocks are functioning prior to operations ~~that could result in a fuel handling accident within the reactor building.~~ For conservatism, the Fuel Handling Accident analysis assumes that the four purge valves remain open.

Specification 3.8.10 is required as the safety analysis for the fuel handling accident was based on the assumption that the reactor had been shutdown for 72 hours (Reference 2).

REFERENCES

- (1) UFSAR, Section 14.2.2.1 - "Fuel Handling Accident"
- (2) UFSAR, Section 14.2.2.1(2) - "FHA Inside Containment"

INSERT A TO PAGE 3-45:

With the plant in REFUELING SHUTDOWN or REFUELING OPERATION, neither the equipment hatch or temporary equipment hatch cover are credited in any Fuel Handling Accident Analysis. When a temporary equipment hatch cover is used in place of the equipment hatch, there are no special requirements for sealing, pressure retention, or complete blocking of the opening for this cover. When the equipment hatch is rolled in place as the method of covering the hatch opening, it need not be bolted to the opening.

INSERT B TO PAGE 3-45:

When irradiated fuel movement is in progress and containment integrity is not maintained, the Reactor Building Purge Exhaust System is operated to facilitate air flow into the Reactor Building through the open containment equipment hatch. The Reactor Building purge valve high radiation interlock will be bypassed to ensure continued air flow into the Reactor Building in the event of a Fuel Handling Accident. The Reactor Building Purge Exhaust radiation monitor will be maintained operable. There are no special requirements to achieve continuous air flow into the Reactor Building.

ENCLOSURE 3

List of Commitments

SUMMARY OF AMERGEN COMMITMENTS

The following table identifies commitments made in this document by AmerGen. (Any other actions discussed in the submittal represent intended or planned actions by AmerGen. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE OR "OUTAGE"
<p>TMI Unit 1 administrative controls will require that qualified personnel be designated, that required tools or equipment be identified and staged, and that required guidance be provided to ensure that, in the event of a fuel handling accident inside containment, containment equipment hatch closure is achieved within 45 minutes following an evacuation of the containment. Such prompt closure methods need not completely block the equipment hatch opening or be capable of resisting pressure.</p>	T1R16
<p>TMI Unit 1 will have procedures in place, which will require operation of the Reactor Building Purge Exhaust System and bypassing of the Reactor Building Purge High Radiation Isolation signal whenever irradiated fuel movement is in progress and containment integrity is not maintained. Operation of the Reactor Building Purge Exhaust System is a contingency action, which will decrease doses even further by drawing any release from a postulated fuel handling accident in the proper direction such that it can be treated and monitored.</p>	T1R16
<p>TMI Unit 1 will have procedures in place which will require the placement of continuously operated particulate and radioiodine air sampling equipment inboard of the open containment equipment hatch opening during fuel loading and refueling activities.</p>	T1R16