

Mr. James Knubel, Vice President
and Director - TMI
GPU Nuclear, Inc.
Post Office Box 480
Middletown, PA 17057

October 24, 1996

SUBJECT: ISSUANCE OF AMENDMENT NO. 51 FOR THREE MILE ISLAND NUCLEAR STATION,
UNIT NO. 2 (TAC NO. M91710)

Dear Mr. Knubel:

The Commission has issued the enclosed Amendment No. 51 to Possession-Only License No. DPR-73 for Three Mile Island Nuclear Station, Unit No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated February 16, 1995.

The amendment revises the Technical Specifications (TS) to extend the surveillance interval for demonstrating operability of the containment airlock. It also revises the general surveillance requirements to allow a 24 hour period to perform an inadvertently missed surveillance consistent with the Revised Standard Technical Specifications for Babcock and Wilcox Plants.

A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission biweekly Federal Register notice.

Sincerely,

Original signed by:

Lee H. Thonus, Project Manager
Non-Power Reactors and Decommissioning
Project Directorate
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Docket No. 50-320

Enclosures:

1. Amendment No. 51 to DPR-73
2. Safety Evaluation

cc w/enclosures:
See next page

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PDND:PM *LM*
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20545-0001

October 24, 1996

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A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Michael J. Thonus for".

Lee H. Thonus, Project Manager
Non-Power Reactors and Decommissioning
Project Directorate
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

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J. Knubel
GPU Nuclear, Inc. Unit No. 2

Three Mile Island Nuclear Station
Docket No. 50-320

cc:

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

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

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

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

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

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

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

Ms. Jane Lee
183 Valley Road
Etters, Pennsylvania 17319

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

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

Mr. William P. Dornsife, Director
Bureau of Radiation Protection
Department of Environmental Protection
13th Floor, Rachel Carson State Office
Building
P. O. Box 8469
Harrisburg, Pennsylvania 17105-8469

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

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

Mr. B. A. Mehler
GPU Nuclear, Inc.
P. O. Box 480
Middletown, Pennsylvania 17057

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



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

GPU NUCLEAR, INC

DOCKET NO. 50-320

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

AMENDMENT TO POSSESSION-ONLY LICENSE

Amendment No. 51
License No. DPR-73

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by GPU Nuclear Corporation (GPUN or licensee) dated February 16, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations of the Commission;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the regulations of the Commission and all applicable requirements have been satisfied.

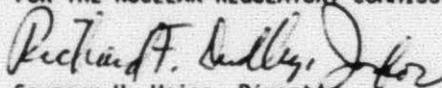
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(1) of possession-Only No. DPR-73 is hereby amended to read as follows:

- (1) Technical Specifications

The Technical Specifications, as revised through Amendment No. 51, are hereby incorporated into this license. The licensee shall maintain the facility in accordance with the Technical Specifications and all Commission Orders issued subsequent to the date of the possession only license.

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

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 24, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 51

POSSESSION-ONLY LICENSE NO. DPR-73

DOCKET NO. 50-320

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

3/4.0-1
3/4.1-4
B3/4.0-1
B3/4.0-2

INSERT

3/4.0-1
3/4.1-4
B3/4.0-1
B3/4.0-2

3/4.0 LIMITING CONDITIONS FOR PDMS AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITIONS FOR PDMS

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

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

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

SURVEILLANCE REQUIREMENTS

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

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval.

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

4.0.4 If it is discovered that a surveillance was not performed within its specified frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, whichever is less. This delay period is permitted to allow performance of the Surveillance.

CONTAINMENT AIR LOCKS

LIMITING CONDITIONS FOR PDMS

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

APPLICABILITY: PDMS

ACTION:

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

SURVEILLANCE REQUIREMENTS

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

- a. The capability exists to expeditiously close at least one Air Lock door;
- b. The Air Lock doors and Containment Purge are configured to restrict the outflow of air in accordance with site-approved procedures; and
- c. The Air Lock doors are cycled to ensure mechanical operability within seven days prior to opening both doors.

3/4.0 APPLICABILITY

BASES

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

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

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

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

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

4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified. The allowable tolerance is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

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

3/4.0 APPLICABILITY (Con't)

BASES

4.0.4 This specification establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a surveillance has not been completed within the specified frequency. A delay period of up to 24 hours applies from the point in time that it is discovered that the required surveillance has not been performed and not at the time that the specified frequency was not met.

The delay period provides an adequate time to complete surveillances that have been missed. This delay period permits the completion of a surveillance before complying with required actions or other remedial measures that might preclude completion of the surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the surveillance, the safety significance of the delay in completing the required surveillance, and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the requirements.

When a surveillance with a frequency based not on time intervals, but upon specified unit conditions or operational situations, is discovered not to have been performed when specified, this provision allows the full delay period of 24 hours to perform the surveillance.

Failure to comply with specified surveillance frequencies is expected to be an infrequent occurrence. Use of the delay period is not intended to be used as an operational convenience to extend surveillance intervals.

If a surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the required actions for the applicable LCO conditions begin immediately upon expiration of the delay period. If a surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the required actions for the applicable LCO conditions begin immediately upon failure of the surveillance.

Completion of the surveillance with the delay period allowed by this specification, or within the completion time of the actions, restores compliance.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 51 TO POSSESSION-ONLY LICENSE NO. DPR-73

GPU NUCLEAR, INC.

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

DOCKET NO. 50-320

1.0 INTRODUCTION

By letter dated February 16, 1995, GPU Nuclear, Inc. then known as GPU Nuclear Corporation, (GPUN, or licensee) submitted a request for changes to the Technical Specifications (TS) for Three Mile Island Nuclear Station, Unit No. 2. The proposed changes would extend the surveillance interval to demonstrate operability of the containment airlocks from quarterly to annually. The purpose of the change is to decrease the personnel exposure associated with implementing the surveillance. The changes would also allow a period of 24 hours to correct any inadvertently missed surveillance and delete an administrative requirement regarding time extensions on consecutive surveillance; these proposed changes would make the TMI-2 Technical Specifications consistent with TMI-1 and the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430, September 1992).

2.0 BACKGROUND

Three Mile Island Unit 2 (TMI-2) is in a permanently shutdown and defueled state of post-defueling monitored storage (PDMS), which is similar to SAFSTOR. The remaining TMI-2 staff conducts periodic monitoring and surveillance and limited dismantlement activities. Since the TMI-2 accident on March 28, 1979, the licensee has conducted a comprehensive cleanup program to ensure that the facility is safe and stable. Following mitigation of the accident and stabilization of the facility, the major efforts of the licensee during the past 17 years have included partial facility decontamination; removal of fuel from the reactor vessel and other facilities; offsite shipment of substantial quantities of both high-level and low-level radioactive wastes; and the removal, treatment, and disposal of the accident-generated water. The NRC staff issued a license amendment with attached safety evaluation on December 28, 1993, which allowed the facility to enter this long-term storage mode. The licensee is maintaining the facility in long-term storage until Three Mile Island Nuclear Station, Unit No. 1 (TMI-1), located on the same site as TMI-2, permanently ceases operation, at which time both facilities will be decommissioned.

3.0 EVALUATION

The proposed amendment would revise specification 4.1.1.3 of the surveillance section of the technical specifications (TS). This section currently requires that the airlock surveillance be performed quarterly. Allowing an annual surveillance would make the containment airlock surveillance consistent with the remainder of the containment penetrations and save 50 person-millirem per surveillance.

The NRC staff reviewed the licensing basis for the containment integrity surveillance and could not identify any adverse safety impact resulting from this change. The staff's previous safety evaluation for PDMS conditions, dated December 28, 1993, considered a variety of accident scenarios including (1) vacuum canister failure, (2) high pressure spray of contamination, (3) cutting contaminated pipe, (4) break of contaminated pipe, (5) elevator/stairwell fire in containment, (6) fire in the containment D-rings, (7) containment penetration failure, and (8) the rupture and release of resins from Makeup and Purification Demineralizers. For the most severe of these accidents, the fire in the containment D-rings, the total body and bone dose to the maximally exposed individual at the site boundary was 49 and 51 mrem, respectively. These results are a small part of the 10 CFR Part 20 limits and a very small fraction of 10 CFR Part 100 limits. The proposed change would not alter the staff's previous analysis and would not create a new potential accident scenario. The proposed change is acceptable to the NRC staff.

The proposed amendment would also revise TS Section 4.0.2 regarding the allowable time extension to complete surveillance requirements. The current specification allows a 25 percent time extension on each surveillance and a total 25 percent time extension on a series of four consecutive surveillances. The proposed change deletes the limitation regarding four consecutive surveillances. This proposed change will not affect plant equipment or safety. The change will make the TMI-2 TS consistent with the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430) and with the TMI-1 TS. The bases for the TS, which are included with Appendix A to the facility license but are not considered part of the TS, will be revised to reflect the change in 4.0.2. The staff finds this change acceptable.

The proposed change would modify TS Section 4.0.4 to allow a 24-hour period to complete a missed surveillance without entering an action statement. This delay is permitted to allow performance of the surveillance. This change will not affect plant equipment or safety. The change will make the TMI-2 TS consistent with the Standard Technical Specifications for Babcock and Wilcox Plants (NUREG-1430, September 1992) and with the TMI-1 TS. The bases for the TS, which are included with Appendix A to the facility license but are not considered part of the TS, will be revised to reflect the change in 4.0.4. The staff finds this change acceptable.

4.0 STATE CONSULTATION

In accordance with the regulations of the Commission, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 28616). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (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 regulations of the Commission, 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.

Principal Contributor: Lee H. Thonus

Date: October 24, 1996