

March 26, 2001

Mr. Mark E. Warner
Vice President - TMI Unit 1
AmerGen Energy Company, LLC
P.O. Box 480
Middletown, PA 17057

SUBJECT: TMI-1 - AMENDMENT RE: LICENSE AMENDMENT REQUEST NO. 302 -
U-235 LOADING CRITERIA (TAC NO. MB0965)

Dear Mr. Warner:

The Commission has issued the enclosed Amendment No. 231 to Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit 1 (TMI-1), in response to your application dated January 15, 2001. Camera-ready changes to Technical Specification (TS) page 5-7 were provided by letter dated February 20, 2001.

The amendment revises the existing TS 5.4.2(f) to remove the fuel assembly U-235 loading criterion for fuel assemblies stored in the spent fuel storage pool.

A copy of the related safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Timothy G. Colburn, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosures: 1. Amendment No. 231 to DPR-50
2. Safety Evaluation

cc w/encls: See next page

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Accession Number: ML010370242 *SE provided. No substantive changes made.

OFFICE	PDI-1\PM	PDI-1\LA	SRXB *	RTSB\SC	OGC	PDI-1\SC
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DATE	2/23/01	3/22/01	01/24/01	3/1/01	3/16/01	3/22/01

Official Record Copy

AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 231
License No. DPR-50

1. The Nuclear Regulatory Commission (the Commission or NRC) has found that:
 - A. The application for amendment by AmerGen Energy Company, LLC (the licensee), dated January 15, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate 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 Commission's regulations;
 - 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 Commission's regulations 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.(2) of Facility Operating License No. DPR-50 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 231, are hereby incorporated in the license. The AmerGen Energy Company, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance including issuance of approval of changes to the Updated Final Safety Analysis Report as described in the NRC staff's safety evaluation.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/ Peter Tam for

Marsha Gamberoni, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: March 26, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 231

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove
5-7

Insert
5-7

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 231 TO FACILITY OPERATING LICENSE NO. DPR-50
AMERGEN ENERGY COMPANY, LLC
THREE MILE ISLAND NUCLEAR STATION, UNIT 1
DOCKET NO. 50-289

1.0 INTRODUCTION

By letter dated January 15, 2001, AmerGen Energy Company, LLC (the licensee), requested changes to the Three Mile Island Nuclear Station, Unit 1 (TMI-1), Technical Specifications (TSs) to remove the existing fuel assembly U-235 loading criterion (66.2 grams of U-235 per axial centimeter of fuel assembly) for fuel assemblies stored in the spent fuel pool from TS 5.4.2(f). The Updated Final Safety Analysis Report would be revised to explicitly state that changes to fuel designs that increase reactivity (including U-235 loading) must be evaluated for any impact on safety. The fuel assembly maximum allowable initial enrichment would remain in the fuel storage TS. The licensee also provided a camera-ready copy of TS page 5-7 by letter dated February 20, 2001.

2.0 EVALUATION

The fuel assembly U-235 loading criterion specified in TS 5.4.2(f) does not represent an input parameter or limiting design condition for any supporting design basis analyses applicable to the TMI-1 fuel storage requirements. In addition, the U-235 loading criterion is not an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, this criterion does not meet the requirements for a limiting condition for operation to be included in the TSs as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36(c)(2)(ii). Subcriticality of the spent fuel pool is ensured by the TS allowable values of the fuel assembly maximum U-235 initial enrichment, soluble boron requirements, allowable initial enrichment versus burnup, and rack spacing. These parameters are controlled by TMI-1 TS Sections 5.4.1 and 5.4.2 and ensure that the effective multiplication factor (k-effective) in the spent fuel pool is maintained less than 0.95, as required by TS 5.4.1. The proposed change is also consistent with the Nuclear Regulatory Commission (NRC) Standard Technical Specifications, Babcock & Wilcox Plants, NUREG-1430, Revision 1, April 1995.

Based on the review described above, the NRC staff finds the proposed removal of the U-235 loading criterion for fuel assemblies stored in the TMI-1 spent fuel pool from TS 5.4.2(f) acceptable. This loading criterion does not meet the 10 CFR 50.36 requirements for inclusion in the TSs. Any changes to fuel designs that involve U-235 loading will, of course, be performed on a cycle-by-cycle basis as part of the reload safety evaluation process pursuant to 10 CFR 50.59. Each reload design is evaluated to confirm that the cycle core design adheres

to the limits that exist in the accident analyses and the TSs to ensure that reactor operation is acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (66 FR 11051). 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.

5.0 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 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.

Principal Contributor: L. Kopp

Date: March 26, 2001

Three Mile Island Nuclear Station, Unit No. 1

cc:

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